LEVEL II

(1)

PUYALLUP RIVER PROJECT RESOURCE USE PLAN

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US ARMY CORPS OF ENGINEERS

Seattle District

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Washington (State)	Recreation	Sumner
	Environmental Protection	

20. ABSTRACT *(Continue on reverse side if necessary and identify by block number)*

The purpose of this report is to identify resources, define objectives, and formulate a plan for long range use of the resources of the Corps of Engineers' Puyallup River Flood Control Project. Located along the Puyallup River between the East 11th Street Bridge, to the city limits of Tacoma, it was authorized by Congress in 1936 and completed in 1950. The project

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SECURITY CLASSIFICATION OF THIS PAGE *(When Data Entered)*

included channelization and stabilization of the river banks, and the construction and maintenance of levees to give protection to the Tacoma industrial area. In addition to looking at the Corps of Engineers' Project, this report discusses the area surrounding the Project to establish a context for resource use planning. Thus, the portion of the river between Commencement Bay and the City of Sumner is identified as the "study area."

This report is the first phase of a two phase planning study for the Puyallup River's resources. The first phase inventoried existing conditions, analyzed resource capabilities and formulated a Resource Use Plan. Based upon this analysis, the Corps of Engineers and the local jurisdictions will decide upon the feasibility of proceeding with the second phase of resource planning. The Corps of Engineers is prepared to undertake the second planning phase if there is an expression of interest from local governmental bodies in participating in the resource development of the Puyallup River. The second phase of the study will refine the Resource Use Plan, analyze development costs, prepare an implementation program and conduct an environmental assessment.

DEPARTMENT OF THE ARMY
SEATTLE DISTRICT, CORPS OF ENGINEERS
P.O. BOX C-3755
SEATTLE, WASHINGTON 98124

NPSOP-PO

31 March 1981

MEMORANDUM TO INTERESTED PARTIES

SUBJECT: Puyallup River Project Resource Use Plan

1. The Puyallup River Project Resource Use Plan, Washington, begins to identify resources and objectives for the Puyallup River. This plan is the first phase of a two-part effort to review the resources of this Federal Flood Control Project.

2. The Puyallup River Resource Use Plan is for your information, comment, and retention. The plan provides material compiled during the first phase and outlines steps for phase two.

3. Development of these resources is dependent upon mutual coordination and cooperation between all agencies concerned with the Puyallup River. We would, therefore, appreciate it if you would circulate this plan to other individuals and groups you feel may be interested. Limited additional copies of the Puyallup River Resource Use Plan are available by writing to the above address, attention Douglas R. Bailey, or calling (206) 764-3440. This plan was initially provided to those listed on the last page of this document.

LEON K. MORASKI
Colonel, Corps of Engineers
District Engineer

PUYALLUP RIVER PROJECT RESOURCE USE PLAN

August 1980

US ARMY CORPS OF ENGINEERS
Seattle District

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PURPOSE

The purpose of this report is to identify resources, define objectives, and formulate a plan for long range use of the resources of the Corps of Engineers' Puyallup River Flood Control Project. Located along the Puyallup River between the East 11th Street Bridge, to the city limits of Tacoma, it was authorized by Congress in 1936 and completed in 1950. The project included channelization and stabilization of the river banks, and the construction and maintenance of levees to give protection to the Tacoma industrial area. In addition to looking at the Corps of Engineers Project, this report discusses the area surrounding the Project to establish a context for resource use planning. Thus, the portion of the river between Commencement Bay and the City of Sumner is identified as the "study area".

PLANNING PROCESS

This report is the first phase of a two phase planning study for the Puyallup River's resources. The first phase inventoried existing conditions, analyzed resource capabilities and formulated a Resource Use Plan. Based upon this analysis, the Corps of Engineers and the local jurisdictions will decide upon the feasibility of proceeding with the second phase of resource planning. The Corps of Engineers Flood Control Project will be identified as the "project". The Corps of Engineers is prepared to undertake the second planning phase if there is an expression of interest from local governmental bodies in participating in the resource development of the Puyallup River. The second phase of the study will refine the Resource Use Plan, analyze development costs, prepare an implementation program and conduct an environmental assessment.

EXISTING CONDITIONS

The natural and cultural conditions along the Puyallup River have changed dramatically during the past century. Industrial growth, especially at the mouth of the river, has eliminated the estuary which had formerly provided a habitat for land and sea animals. Flood control projects have changed the original course of the river through straightening of the river channel and levee construction. These actions have resulted in the alteration of riparian habitats and aquatic systems, and the growth of residential, commercial, and industrial uses. Freeway construction has also contributed to the urban growth in the Puyallup Valley. At present, there is no overall comprehensive plan for management and utilization of the resources in the Puyallup River study area.

SUMMARY

PROBLEMS

- Minimal recreational use of the river except for fishing.
- Little preservation and interpretation of archeological, historical or cultural features along the river.
- Existing land uses largely ignore the presence of the river as an amenity.
- Public access to the river shoreline is constrained by industrial/commercial development, highways and railroads.
- On the lower sections of the river numerous bridges pose conflicts with pedestrian/bicycle travel along the roads on top of the levees.
- The perception of the river is visually confusing.
- The river has been denied its natural function of a linkage for the various activities in the valley.

OPPORTUNITIES

- Development of a trail system linking Sumner, Puyallup, Fife and Tacoma along the Puyallup River shoreline.
- Utilization of lands owned by the Corps of Engineers and Inter County River Improvement District for development of a trail and park system.
- Development of additional lands owned by the Corps and Inter County District for small passive recreational areas.
- Revision of land use plans for the areas adjacent to the Puyallup to take advantage of the river as a visual and recreational amenity.
- Protection of existing wetland/natural areas.
- Development of facilities for launching small boats on the Puyallup in the vicinity of East 11th Street in Tacoma.
- Development of interpretive displays and exhibits for the river's rich archeological, cultural and historical features.

RESOURCE USE OBJECTIVES

Based upon inventory and analysis of existing conditions, Resource Use Objectives have been formulated for resource management within the Flood Control Project and for the overall study area. Major objectives are: Utilize the natural resources of the river for a variety of recreational uses, while providing for the operational requirements of the flood control project. Preserve and protect the ecologic character of sensitive environments.

ALTERNATIVES

Four "Resource Use" conceptual alternatives were developed for the Study Area based on analysis of existing conditions, and in response to the Resource Use Objectives:

1. "Do Nothing" - prediction of the conditions along the Puyallup River without utilization and development of existing opportunities.

2. Trail and recreational facilities on the Corps project land.

3. Development of the trail and recreational facilities on the north bank from the mouth to Sumner.

4. Development of a trail and recreational facilities on both banks of the Puyallup River.

RECOMMENDED DEVELOPMENT

It is recommended that the Corps of Engineers and other jurisdictions within the Puyallup Valley pursue the development of a ten mile multi-use trail linking Tacoma, Fife, Puyallup and Sumner. It is also recommended that a series of day use parks, natural areas and historical/cultural interpretive features be developed along the river.

IMPLEMENTATION

Development of the Resource Use Plan will require the combined efforts of the Corps of Engineers, City of Tacoma, Pierce County, Inter County River Improvement District, the Cities of Fife, Puyallup and Sumner, Puyallup Tribe and Port of Tacoma. The Corps of Engineers can potentially share up to fifty percent of the cost of recreational development with local sponsors within the limits of the Federal Flood Control Project.

ENVIRONMENTAL CONSIDERATIONS

Because of the conceptual nature of this study in-depth assessments of impacts on a site-by-site basis for potential recreational developments, were not conducted. Preliminary analysis has provided information on ecologically valuable and sensitive areas where recreational development would either be ruled out, or undertaken with only the greatest of care to insure resource integrity. Alternately, through analysis other areas have been identified where either integrity. Alternately, through analysis other areas have been identified where such development could be accomplished with little or no adverse impact. Results of the preliminary analysis will be documented in an environmental assessment or environmental impact statement, as appropriate, during refinement of concept plans in Phase II studies.

PREHISTORIC AND CULTURAL RESOURCES

Preliminary analysis indicates that direct adverse impacts of development, if pursued from the conceptual framework contained herein, will have little effect on cultural or prehistoric/historic resources known to exist within the boundaries of the Federally operated and maintained project. Identification and evaluation of yet unknown cultural resources within the Federal project limits and an assessment of project impacts on them will be required during refinement of concept plans in Phase II studies.

The Puyallup River Flood Control Project was authorized by the Flood Control Act of June 22, 1936, and completed in 1950 by the Seattle District Corps of Engineers. Channel improvements were authorized in 1936 for the two mile portion of the river between the 11th St. Bridge and the Tacoma city limits, in order to give flood protection to the industrial section of Tacoma through the channelization of the river, and the construction of levees and revetments. In 1962, the authorization was amended to include the construction of recreational facilities within the flood control project area.

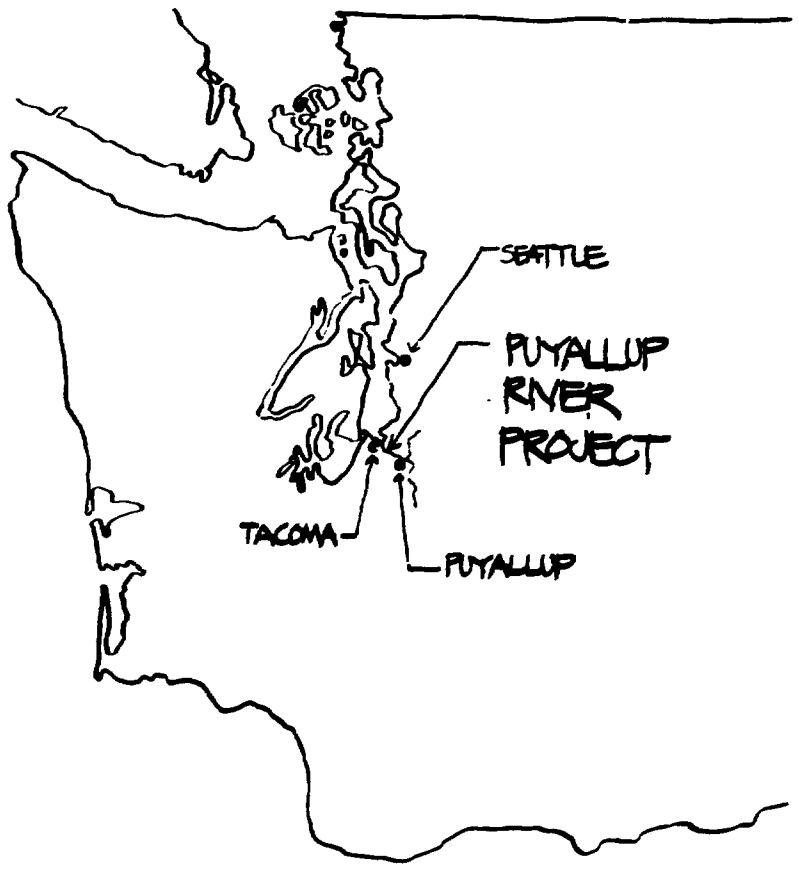
The Puyallup River Resource Use Plan was commissioned in 1979 by the Seattle District Corps of Engineers in order to identify and plan for "resource uses" within the Corps authorized flood control project. The Corps of Engineers is required, through a 1978 directive by the office of the Chief of Engineers, the Department of the Army, to establish "resource use ojectives" for all water resource projects. "Resource use objectives" are defined as "clearly written statements, specific to a given project, which specify the attainable options for resource use as determined from study and analysis of resource capabilities and public needs."(1) Natural resources are defined as "physiographic, biological, and/or aesthetic" elements of land and water. (2)

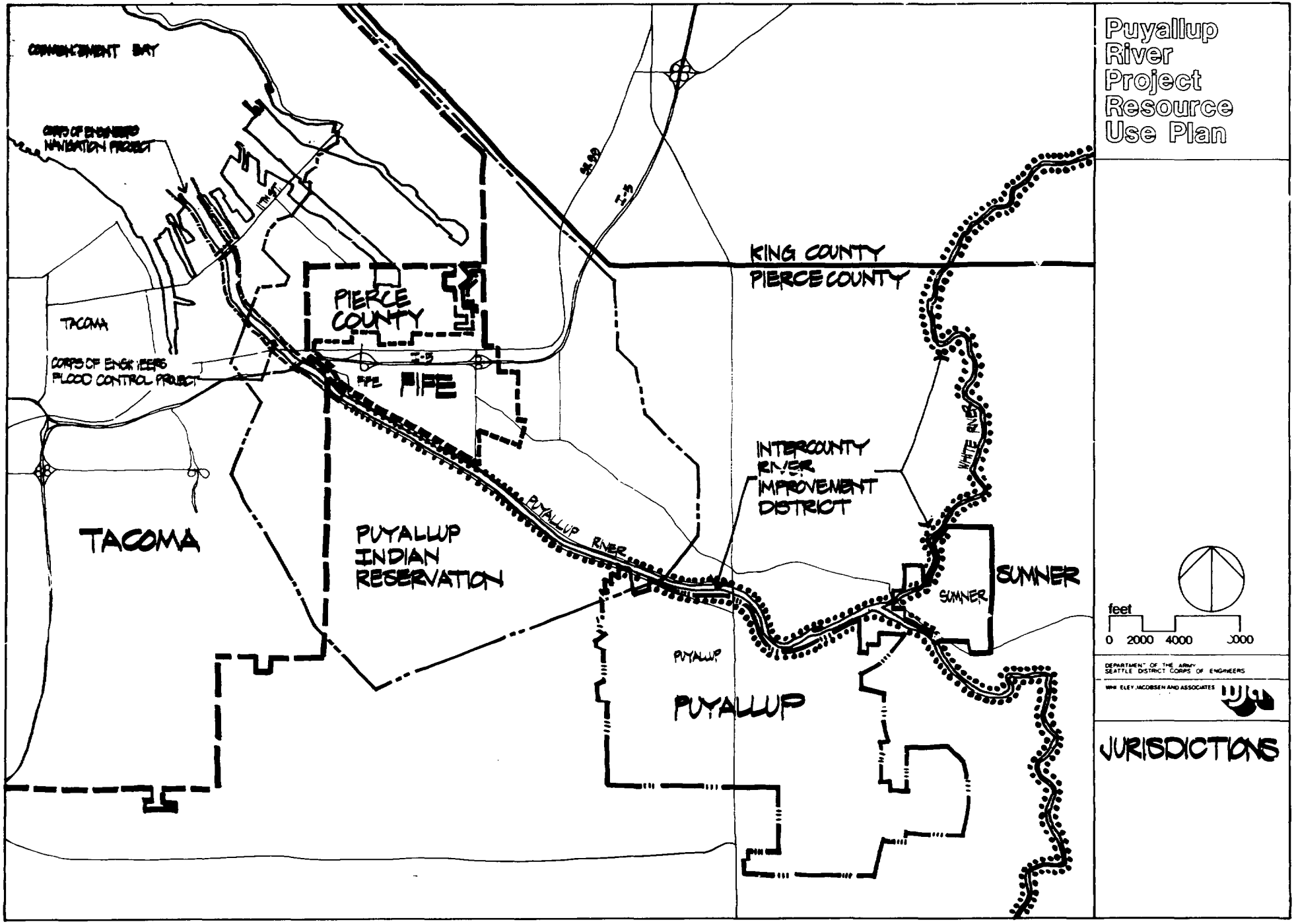
The purpose of this study is to evaluate the use of the river's resources, and to establish objectives for public benefits relating to the Puyallup River Flood Control Project. This study analyzes the resources of the Corp's Project, and also examines the river from Sumner to the mouth at Commencement Bay to define the planning context.

1. INTRODUCTION

STUDY CONTEXT

Located in Western Washington, the Puyallup River is fed by glaciers on the western slopes of Mount Rainier. The Puyallup and White River merge at Sumner to form the Puyallup River. The river flows northwesterly and empties into Commencement Bay at Tacoma. The study area extends along the Puyallup River from Tacoma to Sumner, and includes the following jurisdictions: City of Tacoma, City of Fife, Puyallup Indian Reservation, City of Puyallup, City of Sumner and the unincorporated portions of Pierce County. The Corps of Engineers has jurisdiction over a flood control project between East 11th Street and Fife. The Inter County River Improvement District has jurisdiction over a flood control project from Fife to the City of Auburn.

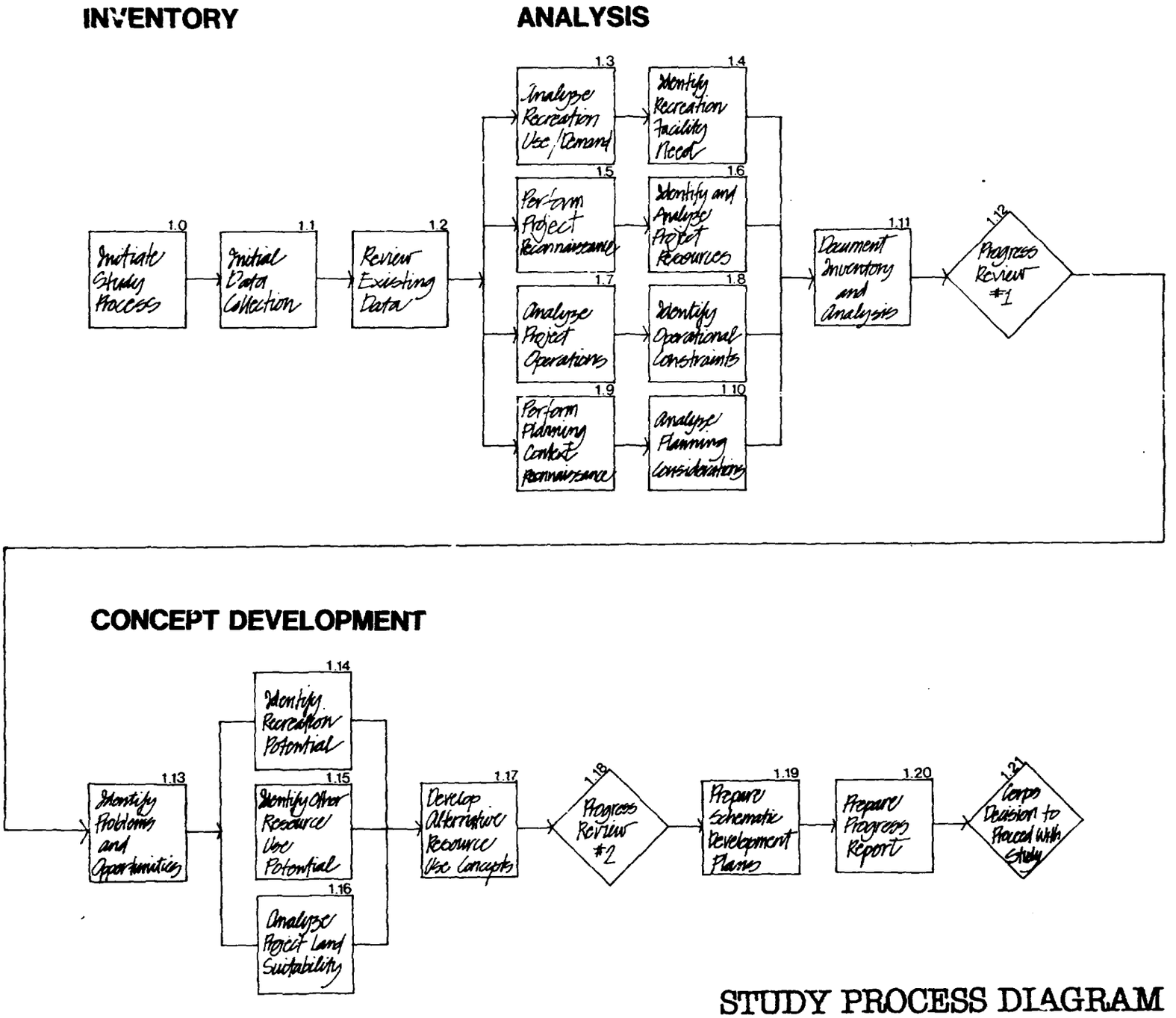



COMMENCEMENT BAY
CORPS OF ENGINEERS NAVIGATION PROJECT
I-5
PIERCE COUNTY
TACOMA
CORPS OF ENGINEERS FLOOD CONTROL PROJECT
PIPE
KING COUNTY
PIERCE COUNTY
INTERCOUNTY RIVER IMPROVEMENT DISTRICT
WHITE RIVER
PUYALLUP RIVER
TACOMA
PUYALLUP INDIAN RESERVATION
SUMNER
PUYALLUP
feet
0 2000 4000
Puyallup River Project Resource Use Plan
DEPARTMENT OF THE ARMY SEATTLE DISTRICT CORPS OF ENGINEERS
WILLEY JACOBSEN AND ASSOCIATES
JURISDICTIONS

STUDY PROCESS

This report is the first phase of a two phase planning study for the Puyallup River's resources. The first phase of the study inventories existing conditions and analyzes resource capabilities. It also develops alternative resource use concepts. Based on this inventory, analysis, and conceptual development, the Corps of Engineers and the local jurisdictions will determine if it is feasible to proceed with the second phase of planning for the project. The second phase of the study will refine the Resource Use Plan and develop an implementation program.

The boxes on the Study Process Diagram (p 1.5) indicate major study tasks. The diamonds represent reviews of major decision points. Involvement of community groups, potential users and public agencies will take place at the start of the second phase.



STUDY PROCESS DIAGRAM
Phase I

AGENCY INVOLVEMENT

The following governmental jurisdictions and public agencies were contacted during the study:

City of Tacoma

Contacts were made with the Department of Community Development, Public Works, Planning, and the Metropolitan Park Board.

Pierce County

Three county departments were contacted: 1. The Puyallup Valley/South Hill section of the Planning Department which is responsible for the unincorporated portions of Pierce County along the Puyallup River between the City of Puyallup and the City of Tacoma; 2. Inter County River Improvement District, which is responsible for the flood control project from Fife past Sumner. 3. The Department of Parks and Recreation.

Other Contacts

City of Puyallup, Puyallup Indian Tribe, Soil Conservation Service, Interagency Committee for Outdoor Recreation, Washington State Department of Fisheries, Washington State Department of Game, Washington State Department of Transportation, Puget Sound Council of Governments, and the Port of Tacoma.

The aquatic and terrestrial systems along the Puyallup River have been highly altered by man over the last 100 years for the development of roads, railroads, industries, flood control and agriculture. The flood control projects with attendent fill for industrial development in the Port of Tacoma area have significantly altered the natural estuary and salt marsh area of the river. The Corps of Engineers and Inter County River Improvement District Flood Control Projects have modified the natural river bank condition through the construction of levees and concrete revetments. Perhaps the most significant man-caused change in the Puyallup River system was the diversion of the White River into the waters of the Puyallup in 1914. This diversion resulted in major increases in the sedimentation of the river and has practically eliminated all navigation by deep draft ships at the mouth.

Land uses along the Puyallup have been changing rapidly over the last ten years as a result of freeway construction and associated suburban residential and commercial development across the Puyallup Valley. The river valley has been making a transition from agricultural to commercial and industrial uses which rely on easy vehicular access.

The following analysis of existing conditions looks at: the history of flood control projects on the river; operational requirements of the flood control projects; existing physical conditions: land use, transportation and access, topography, geology, visual factors, ownership, environmental considerations, recreational use and the plans and policies of the various jurisdictions along the river.

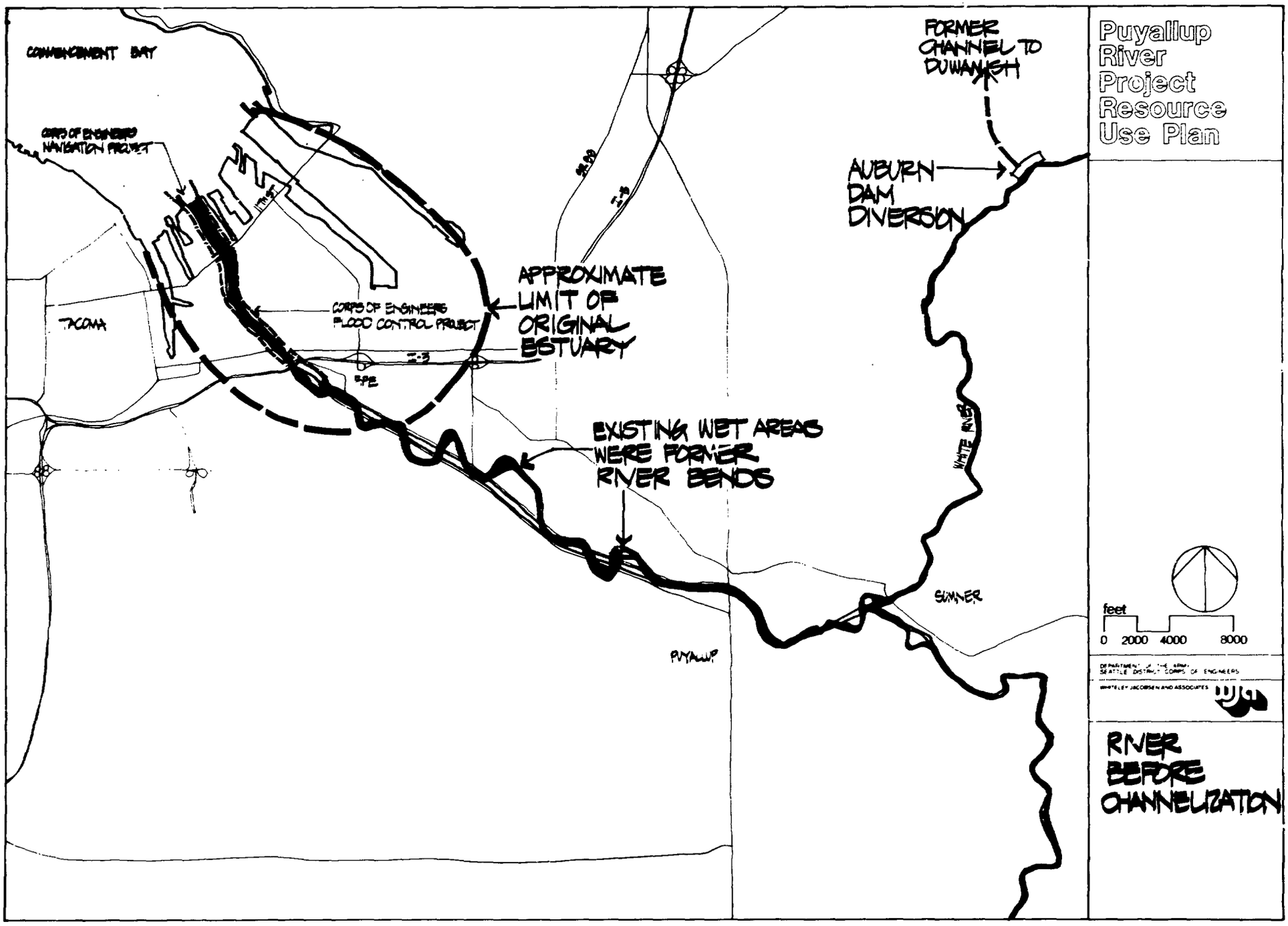
2. EXISTING CONDITIONS

CORPS OF ENGINEERS FLOOD CONTROL PROJECT

The project was authorized by the Flood Control Act of June 22, 1936. It provides for a channel with a capacity of 50,000 second-feet between the East 11th Street Bridge and the lower end of the Inter County River Improvement Project, a distance of about 2.2 miles, by straightening the channel, building levees, revetments and making all necessary bridge changes. The Flood Control Act of June 28, 1938 provides for Federal maintenance of the project. The East 11th Street Bridge at the lower end of the project is 0.75 miles above the mouth of the Puyallup River. The mean tidal range at the mouth of the river is 8.1 feet, the diurnal range is 11.8 feet and the extreme range is 20 feet (estimated). The improvement was planned in conjunction with Mud Mountain Dam, and affords protection against floods about 50 percent greater than the maximum discharge of record.

INTER COUNTY RIVER IMPROVEMENT DISTRICT PROJECT

This cooperative effort between Pierce and King Counties made major improvements to the White-Stuck and Puyallup Rivers between 1914 and 1928. After destructive floods in 1906 the counties began planning for flood control improvements. In 1914, a dam was built at Auburn to divert waters from the White River southward into the Puyallup River and Commencement Bay.(3) Between 1914 and 1978 the Inter County River Improvement District straightened the river channel between Puyallup and Tacoma to increase the channel capacity. In addition to straightening the channel, concrete revetments were constructed on both banks to stabilize the levees/river banks. Maintainence of the Puyallup River between the Corps of Engineers Flood Control Project and Sumner, and the White River between Sumner and the Mud Mountain Dam, continues to fall within the jurisdiction of the Inter County River Improvement District.


COMMENCEMENT BAY
CORPS OF ENGINEERS NAVIGATION PROJECT
TACOMA
CORPS OF ENGINEERS FLOOD CONTROL PROJECT
APPROXIMATE LIMIT OF ORIGINAL ESTUARY
EXISTING WET AREAS WERE FORMER RIVER BENDS
FORMER CHANNEL TO DUWAMISH
AUBURN DAM DIVERSION
WHITE R.
SUMNER
PUYALLUP
Puyallup River Project Resource Use Plan
feet
0 2000 4000 8000
DEPARTMENT OF THE ARMY SEATTLE DISTRICT CORPS OF ENGINEERS
WHITELEY JACOBSEN AND ASSOCIATES
RIVER BEFORE CHANNELIZATION

PROJECT OPERATIONS

Maintenance of the flood control function is a primary consideration in resource use planning for the Corps of Engineers and Inter County projects. Project operational considerations are:

SEGMENT 1 Corps Navigation Project

- Siltation of the channel at its mouth combined with tidal action makes navigation by large vessels impractical.
- Channel maintenance for navigation would require continuous dredging.

SEGMENT 2 Corps Flood Control Project

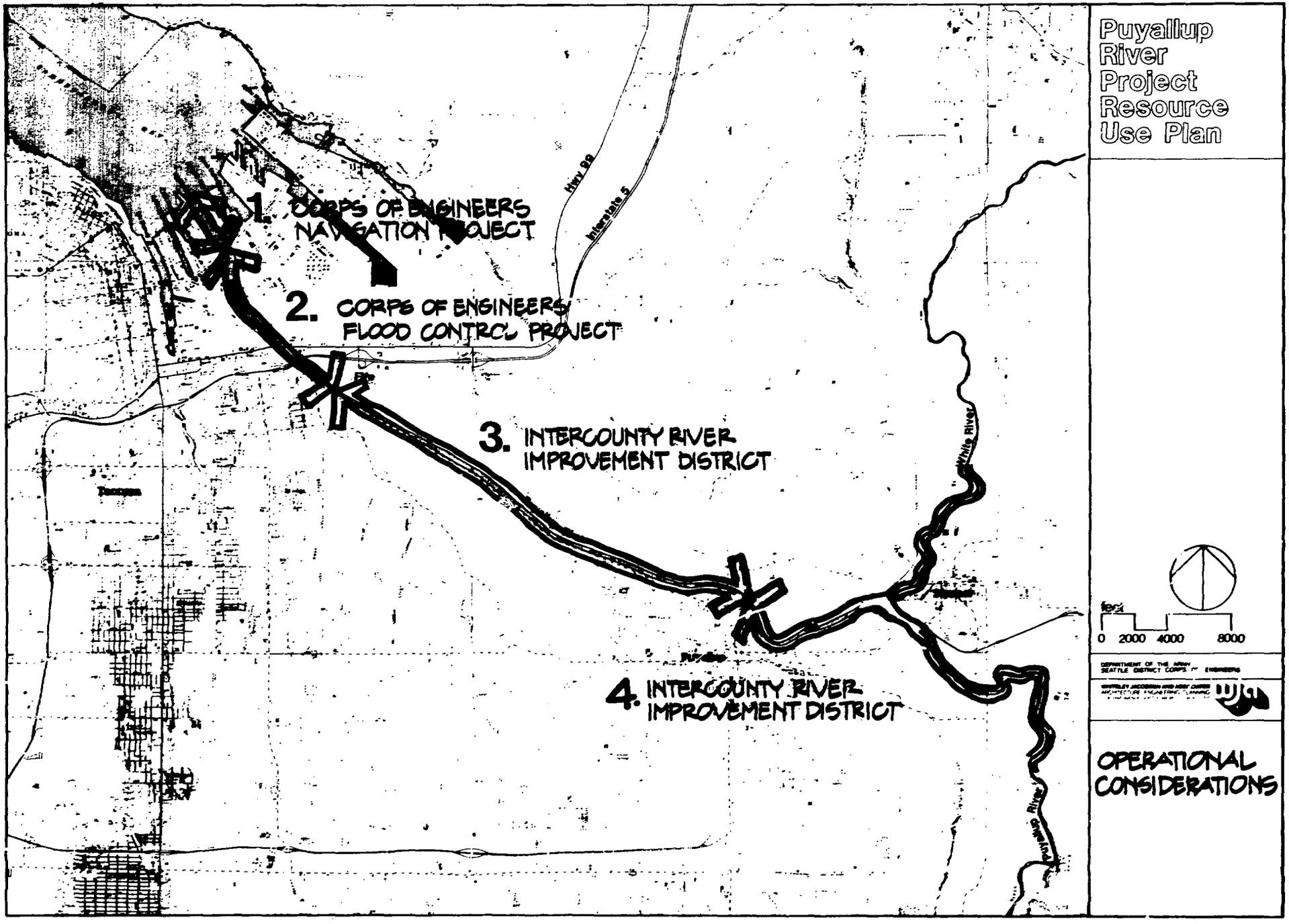
- Channel generally is self maintaining.
- Capacity for 45,000-55,000 CFS river flow.
- Corps needs access for heavy construction equipment for levee maintenance.
- Annual maintenance includes road grading and elimination of major vegetation.
- Court action by Puyallup Tribe temporarily prohibits vegetation removal along shoreline. (presently under appeal)

SEGMENT 3 Inter County River Improvement District (Fife to Puyallup)

- Major siltation along channel has created "benches" on both banks.
- Benches and bottom deposits restrict channel capacity.
- Benches provide areas for vegetation growth.
- Removal of gravel, silt and vegetation restricted by agency funding.
- Court ban on vegetation removal. (county is presently preparing a motion to dissolve the injunction)

SEGMENT 4 Inter County River Improvement District (Puyallup Up Stream)

- Channel capacity severely restricted by gravel and sediment deposits and by heavy vegetation growth.
- Lack of funding and ban on vegetation removal limit maintenance of channel.
- Court ban on vegetation removal (County is presently preparing a motion to dissolve the injunction)


1. CORPS OF ENGINEERS NAVIGATION PROJECT
2. CORPS OF ENGINEERS FLOOD CONTROL PROJECT
3. INTERCOUNTY RIVER IMPROVEMENT DISTRICT
4. INTERCOUNTY RIVER IMPROVEMENT DISTRICT
Hwy 99
Interstate 5
White River
Puyallup River
Tacoma
Puyallup
Puyallup River Project Resource Use Plan
0 2000 4000 8000
DEPARTMENT OF THE ARMY SEATTLE DISTRICT CORPS OF ENGINEERS
OPERATIONAL CONSIDERATIONS

STUDY CONTEXT

To understand the Puyallup River it is necessary to look at its context. The Puyallup has formed a broad alluvial plain about 2 to 3 miles wide and about 10 miles in length. This alluvial plain is bordered on the northeast by headland area, Northeast Tacoma, primarily a suburban residential area. On the west and southwest side of the river valley are the uplands of Tacoma, McKinley Hill and South Hill. The City of Tacoma is a major industrial, commercial and residential center. The largest city in Pierce county, it is the focus of major highway and rail transportation facilities crossing the Puyallup Valley.

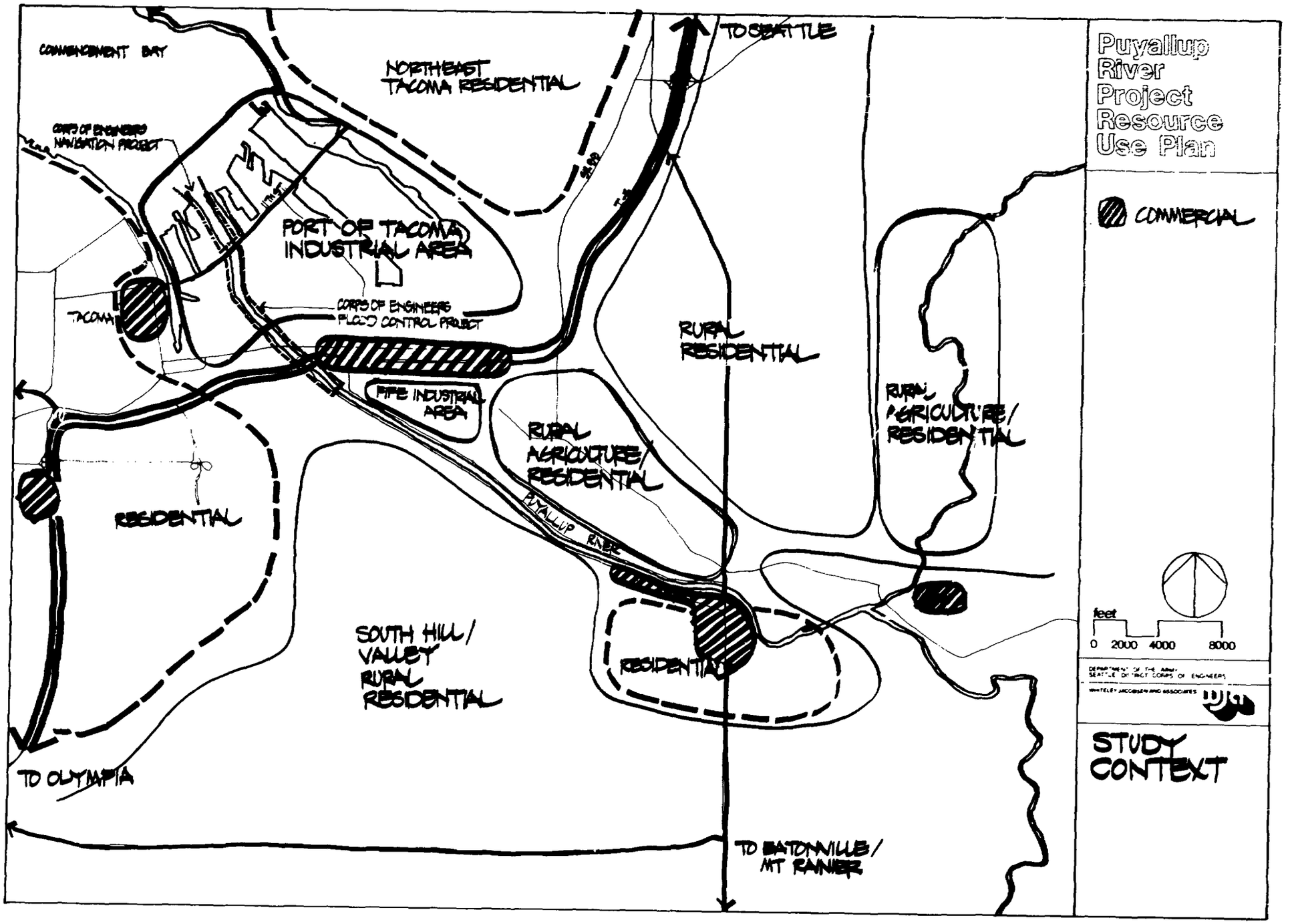
The Port of Tacoma/Industrial Area

This area has been built up over the last hundred years on what was formerly estuarine/salt marsh. Historically the port's shipping and industrial activities have been related to timber industry products such as paper, plywood, doors, cabinets, etc. There has also been an emphasis on bulk commodities such as aluminum refineries and chemical works. More recently there has been development of ship building, warehousing and other light industries.

Interstate 5/Fife

A major physical feature crossing the Puyallup Valley is Interstate 5 which was developed in the 1960's. The construction of I-5 resulted in the development of adjacent light industrial and automobile oriented commercial uses. One story warehouses, light industries, offices, motels and fast-food restaurants occur typically between Tacoma and Puyallup along I-5.

Fife is a small city on the valley floor bisected by Interstate 5. At one time it was a residential area related to the nearby agricultural uses. Fife is rapidly making a transition to industrial and warehousing development relating to Interstate 5 and adjacent railroads.


COMMENCEMENT BAY
NORTHEAST TACOMA RESIDENTIAL
TO SEATTLE
CORPS OF ENGINEERS NAVIGATION PROJECT
PORT OF TACOMA INDUSTRIAL AREA
TACOMA
CORPS OF ENGINEERS FLOOD CONTROL PROJECT
RURAL RESIDENTIAL
FIFE INDUSTRIAL AREA
RURAL AGRICULTURE/ RESIDENTIAL
RURAL AGRICULTURE/ RESIDENTIAL
PUYALLUP RIVER
RESIDENTIAL
SOUTH HILL/ VALLEY RURAL RESIDENTIAL
RESIDENTIAL
TO OLYMPIA
TO EATONVILLE/ MT RAINIER
Puyallup River Project Resource Use Plan
COMMERCIAL
feet
0 2000 4000 8000
DEPARTMENT OF THE ARMY SEATTLE DISTRICT CORPS OF ENGINEERS
WHITELEY JACOBSEN AND ASSOCIATES
STUDY CONTEXT

LAND USE

The map on the facing page shows the distribution of existing land uses along the Puyallup. The following briefly describes each of the land uses.

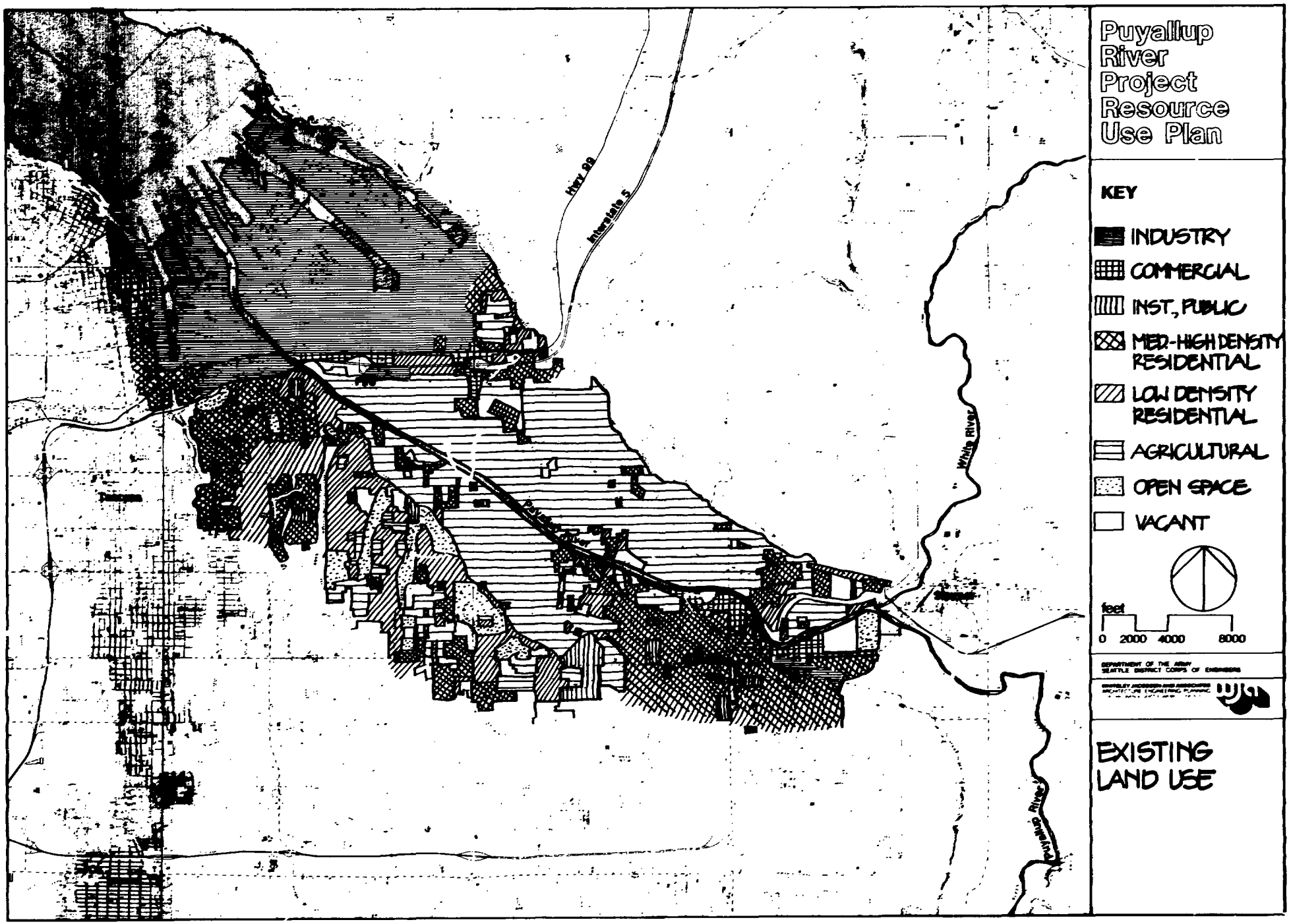
- Industrial. This is the largest land use area in the valley. It is located between Commencement Bay on the north, the Hylebos Waterway on the northeast, Interstate 5 on the south and City Waterway on the west. Basically, industry makes up all of the former estuarine/marsh area of the Puyallup.

- Agricultural/Rural Residential. This area is located between Fife and the City of Puyallup. It is the second largest land use area of the valley and is situated on both sides of the Puyallup River.

- Residential. Residential makes up the third largest land use along the Puyallup River. Major residential concentrations are located along the McKinley Hill-South Hill area in Fife and in the City of Puyallup.

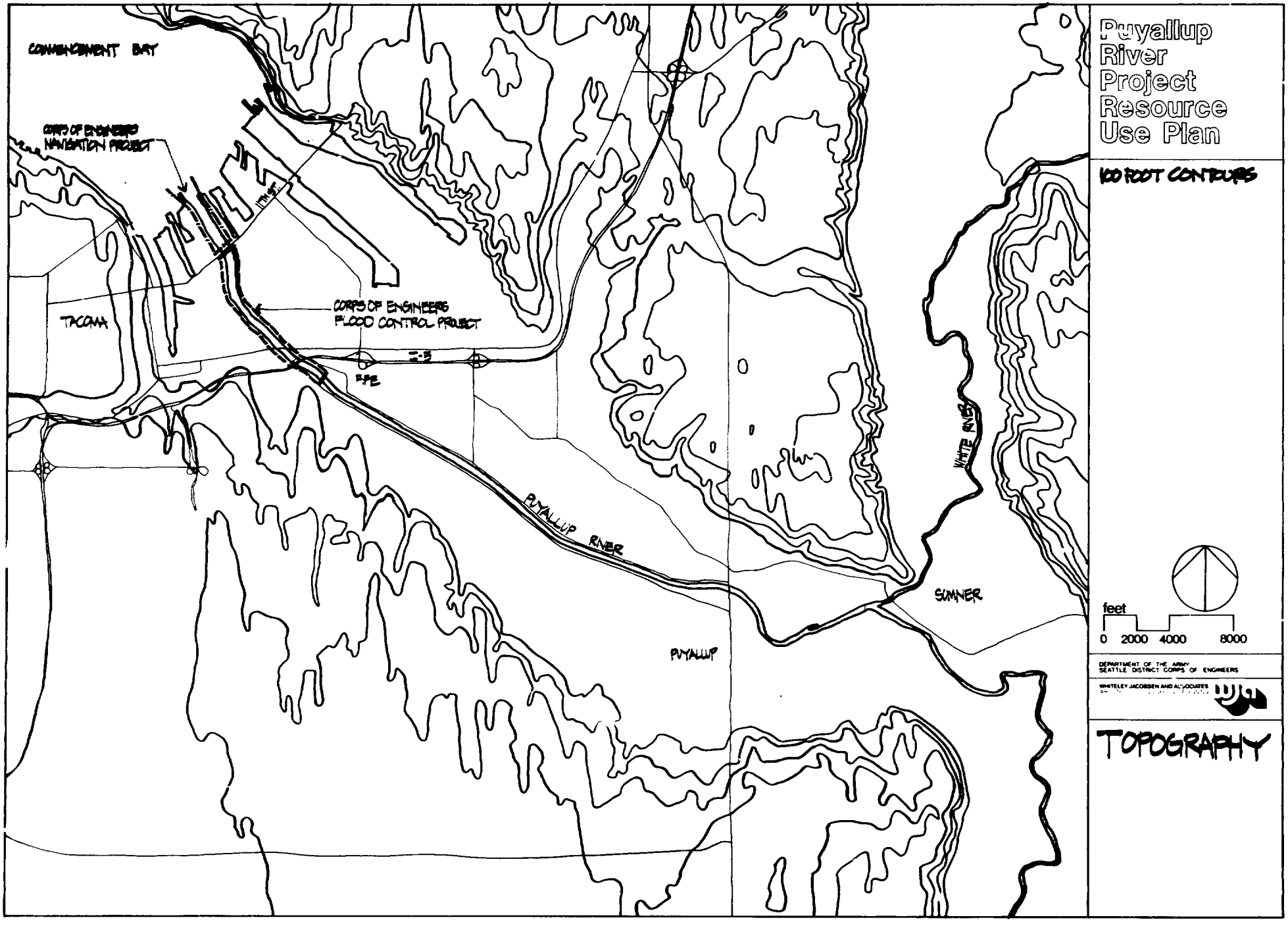
- Commercial. Commercial uses are concentrated along Interstate 5, the City of Fife, and in the City of Puyallup between State Route 410 and the Puyallup River.

- Other uses are dispersed throughout the Puyallup Valley. Among these are institutional uses and open space.


Puyallup River Project Resource Use Plan
KEY
INDUSTRY
COMMERCIAL
INST., PUBLIC
MED.-HIGH DENSITY RESIDENTIAL
LOW DENSITY RESIDENTIAL
AGRICULTURAL
OPEN SPACE
VACANT
feet
0 2000 4000 8000
DEPARTMENT OF THE ARMY
SEATTLE DISTRICT CORPS OF ENGINEERS
EXISTING LAND USE
Hwy 99
Interstate 5
White River
Puyallup River
Puyallup
Sumner

TOPOGRAPHY

The topographical map shows that the valley is primarily level from Puyallup to Tacoma with steep hillsides enclosing the valley on the north, northeast and on the southwest. The map also shows that at Sumner the landform splits into two valleys. One valley runs north and south between Sumner and Auburn containing the White River. A second valley runs southeast of Sumner and contains the Puyallup River.


COMMENCEMENT BAY
CORPS OF ENGINEERS NAVIGATION PROJECT
INNER
TACOMA
CORPS OF ENGINEERS FLOOD CONTROL PROJECT
I-5
PIPE
PUYALLUP RIVER
WHITE RIVER
SUMNER
PUYALLUP
Puyallup River Project Resource Use Plan
100 FOOT CONTOURS
feet
0 2000 4000 8000
DEPARTMENT OF THE ARMY
SEATTLE DISTRICT CORPS OF ENGINEERS
WHITELEY JACOBSEN AND ASSOCIATES
TOPOGRAPHY

SOIL CONDITIONS

Two primary landform processes have created the Puyallup River Valley: glaciation and subsequent deposition of alluvial materials. Five major soil conditions are found in the valley and in the surrounding hills.

The uplands enclosing the river and its flood plain are made up of glacial till. Glacial till is unstratified glacial drift which is deposited by ice, and consists of clay, sand, gravel and boulders. Till is usually very compact and stable, due to compaction by ice at the time of glaciation.

Sand and gravel can be found in slopes at the edges of the floodplain. These materials were deposited by glaciers, and, unlike till, are open, loose, and not well compacted.

Peat was formed by decaying organic matter in pockets left by glaciers, or in swampy areas in lakes or rivers. It is unconsolidated, spongy and wet, and is scattered throughout other soil types.

Alluvium is soil which is deposited by rivers and streams, and forms the floodplain of the Puyallup River. This soil is made up of fine particles of sand, silt, and clay, and was deposited seasonally prior to the development of the flood control projects.

A number of areas of fine sand, silt and muck exist within the former floodplain. These are wet areas whose origin is deposition of fine grained particles from the former river channel of the Puyallup.

There are areas of artificial fill which is composed of materials such as earth, trash, and gravel, which has been placed upon the original soil and graded for urban construction. The artificially filled industrial area at the mouth of the Puyallup River was formerly a salt marsh.

Puyallup River Project Resource Use Plan

KEY

- GLACIATED UPLANDS
- SAND & GRAVEL
- PEAT DEPOSITS
- RIVER ALLUVIUM
- ARTIFICIAL FILL
- FINE SAND

feet
0 2000 4000 8000

DEPARTMENT OF THE ARMY
SEATTLE DISTRICT CORPS OF ENGINEERS

WHITELEY-ADDISON AND ASSOCIATES
ARCHITECTURE ENGINEERING PLANNING

SOIL CONDITIONS

ACCESS

The study area is well served by highways, roads and railroads. There is considerably less transit and bicycle accessibility.

Highways

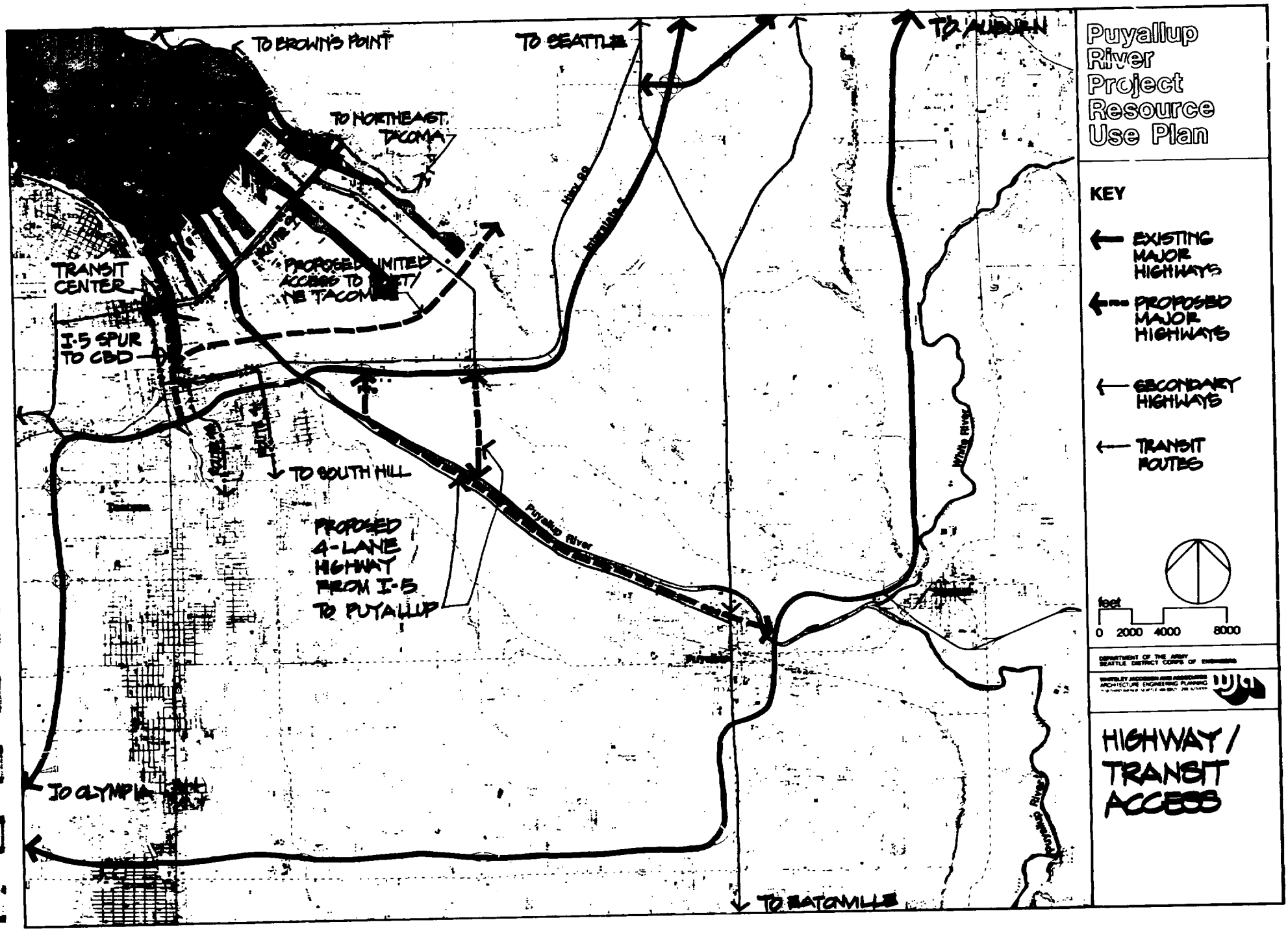
Major highways crisscross the Puyallup Valley. The most dominant highway is Interstate 5 which connects Seattle, Tacoma, Olympia, and Portland. Interstate 5 crosses the Puyallup Valley in a generally east/west direction. Major freeway interchanges occur at Valley Avenue and the Port of Tacoma Road in Fife and at the west side of the Puyallup River at Tacoma. These interchanges are designed to link up with future four-lane limited access highways which will connect Interstate 5 with Puyallup and Sumner.

Other major roads include East 11th Street, which connects Downtown Tacoma with Northeast Tacoma. The major road link between Tacoma and Puyallup is four-lane state Route 410 which runs along the south levee of the Puyallup.

Proposed highways include: A freeway spur from Interstate 5 to the Tacoma Central Business District; and a potential spur extension through the port industrial area across the Puyallup River to Northeast Tacoma. There is also a proposed freeway connection from Interstate 5 along the north or south side of the Puyallup River to the City of Puyallup.

Transit

The City of Tacoma operates two transit lines which provide access to the study area. Route 99 provides service from Browns Point and Northeast Tacoma to downtown Tacoma along East 11th Street, and Route 41 provides access from South Hill to the downtown along Portland Avenue and Highway 99.



Puyallup River Project Resource Use Plan

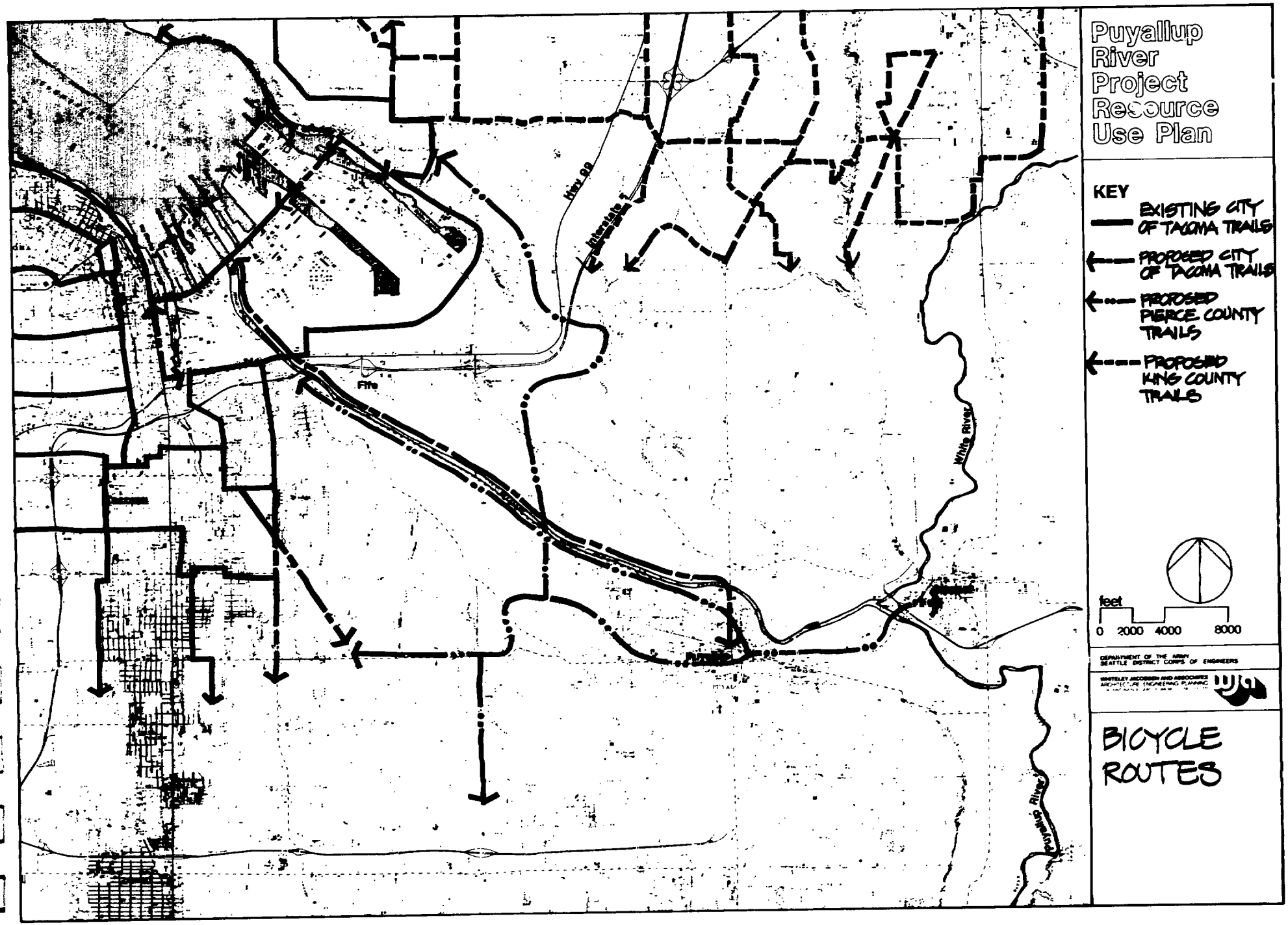
HIGHWAY / TRANSIT ACCESS

BICYCLE ROUTES

There is one developed bicycle facility which serves the study area; the East 11th Street Bicycle Trail in the City of Tacoma, along the northern border of the Corps' Flood Control Project. This trail connects the city center with northeast Tacoma. The City has designated a second bicycle route which could serve the study area along Highway 99 through the industrial area to northeast Tacoma. There are presently no facility improvements along this route and its heavy traffic probably discourages much bicycle use. Both the City of Tacoma and Pierce County have proposed development of a bicycle route along the Puyallup River connecting Tacoma with Puyallup and Sumner. In addition, Pierce County has proposed bicycle routes that would connect the Puyallup River trail with residential areas to the north and south.

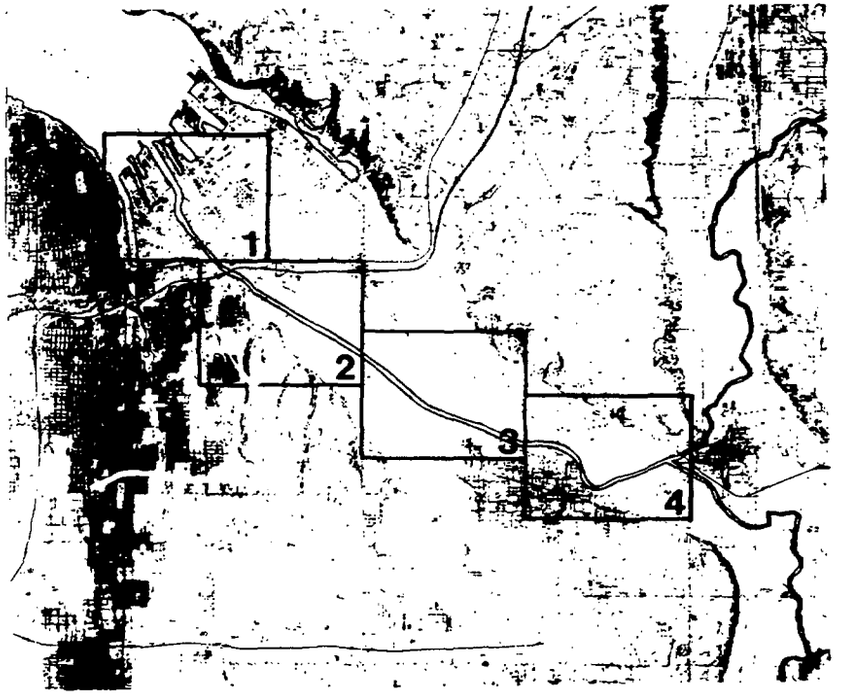
Railroads

There are four major rail crossings of the Puyallup between Fife and the mouth of the river. These crossings are operated by two rail companies, the Milwaukee Railroad and the Union Pacific. In addition to its river crossing, the Milwaukee Railroad operates a major switching/train makeup facility adjacent to the Puyallup River at the mouth. Prior to its recent bankruptcy, it was developing a new switching facility near Fife.


Puyallup River Project Resource Use Plan
KEY
EXISTING CITY OF TACOMA TRAILS
PROPOSED CITY OF TACOMA TRAILS
PROPOSED PIERCE COUNTY TRAILS
PROPOSED KING COUNTY TRAILS
feet
0 2000 4000 8000
DEPARTMENT OF THE ARMY SEATTLE DISTRICT CORPS OF ENGINEERS
WHITELEY MCCOBEEN AND ASSOCIATES ARCHITECTURE ENGINEERING PLANNING
BICYCLE ROUTES
Hwy 99
Interstate 5
Fife
White River
Puyallup River

VISUAL ANALYSIS

A visual survey was conducted of the study area from the mouth of the river to Sumner. The purpose of the visual analysis was to inventory various natural and physical features along the river. The visual analysis maps which follow document various existing conditions such as land use, natural factors, accessibility, views, open space, etc. The key map below shows the location of the four visual analysis maps.



Key Map

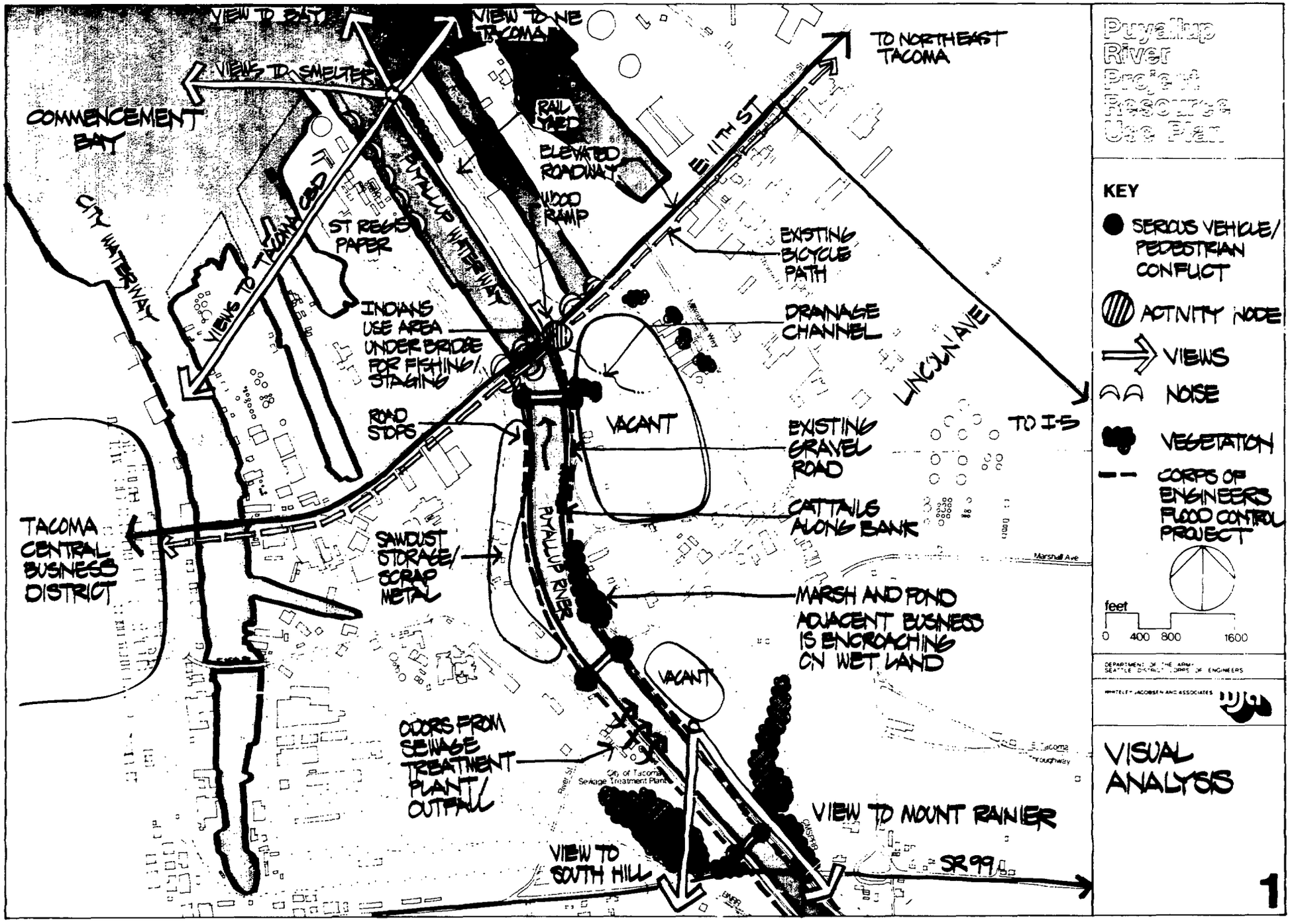
VISUAL ANALYSIS

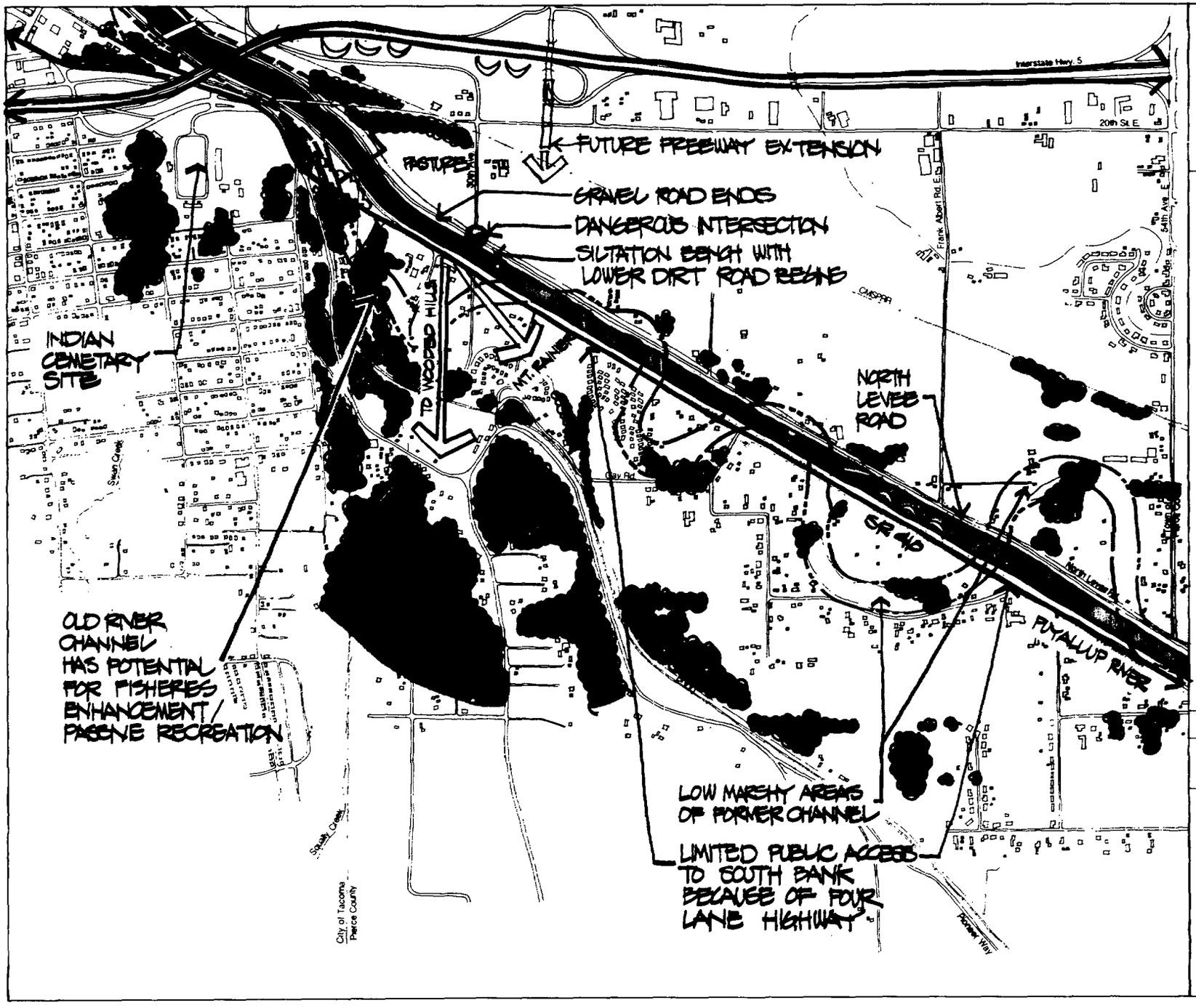
Map 1. This segment of the river passes through the Port of Tacoma Industrial Area. There are five bridges crossing the river in this segment. The area is characterized by heavy industrial land uses, utilities such as the City of Tacoma sewage treatment plant and extensive transportation facilities. Much of the area, especially on the northeast side of the river, is undeveloped.

Map 2. This map shows the area of transition between Tacoma/Fife and the agricultural residential areas along the Puyallup River. The upper left corner of the map shows concentrations of rail and highway facilities adjacent to the river banks. The area between Interstate 5 and the river presently is undergoing change from agricultural use to transportation, warehousing and manufacturing and auto oriented commercial uses. The area on the south side of the Puyallup River is in transition from agricultural use to residential mobile homes, and strip commercial uses.

Map 3. The area on both sides of the river is primarily in agricultural use. This area also contains low marshy areas which were once part of the river channel before development of the flood control projects.

Map 4. This is the area where the river bends sharply at Puyallup and Sumner. It is also an area where a large population lives within walking, bicycling or a short driving distance to the river. The map shows that the uses located along the Puyallup take little advantage of its amenities.


VIEW TO EAST
VIEW TO NE TACOMA
VIEWS TO SMELTER
TO NORTH EAST TACOMA
COMMENCEMENT BAY
RAIL YARD
ELEVATED ROADWAY
E 11TH ST
CITY WATERWAY
PUYALLUP WATERWAY
WOOD RAMP
ST REGIS PAPER
VIEWS TO TACOMA
EXISTING BICYCLE PATH
INDIANS USE AREA UNDER BRIDGE FOR FISHING/ STAGING
DRAINAGE CHANNEL
LINCOLN AVE
TO I-5
ROAD STOPS
VACANT
EXISTING GRAVEL ROAD
CATTAILS ALONG BANK
TACOMA CENTRAL BUSINESS DISTRICT
SAWDUST STORAGE/ SCRAP METAL
PUYALLUP RIVER
Marshall Ave
MARSH AND POND
ADJACENT BUSINESS IS ENCROACHING ON WET LAND
VACANT
ODORS FROM SEWAGE TREATMENT PLANT OUTFALL
City of Tacoma Sewage Treatment Plant
VIEW TO MOUNT RAINIER
VIEW TO SOUTH HILL
SR 99
Puyallup River Project Resource Use Plan
KEY
SERIOUS VEHICLE/ PEDESTRIAN CONFLICT
ACTIVITY NODE
VIEWS
NOISE
VEGETATION
CORPS OF ENGINEERS FLOOD CONTROL PROJECT
feet
0 400 800 1600
DEPARTMENT OF THE ARMY SEATTLE DISTRICT, CORPS OF ENGINEERS
WHITELEY JACOBSEN AND ASSOCIATES
VISUAL ANALYSIS
1



Puyallup River Project Resource Use Plan

KEY

- PEDESTRIAN/ VEHICLE CONFLICT
- VIEWS
- VEGETATION
- CORPS OF ENGINEERS FLOOD CONTROL PROJECT
- AGRICULTURE/ OPEN FIELD

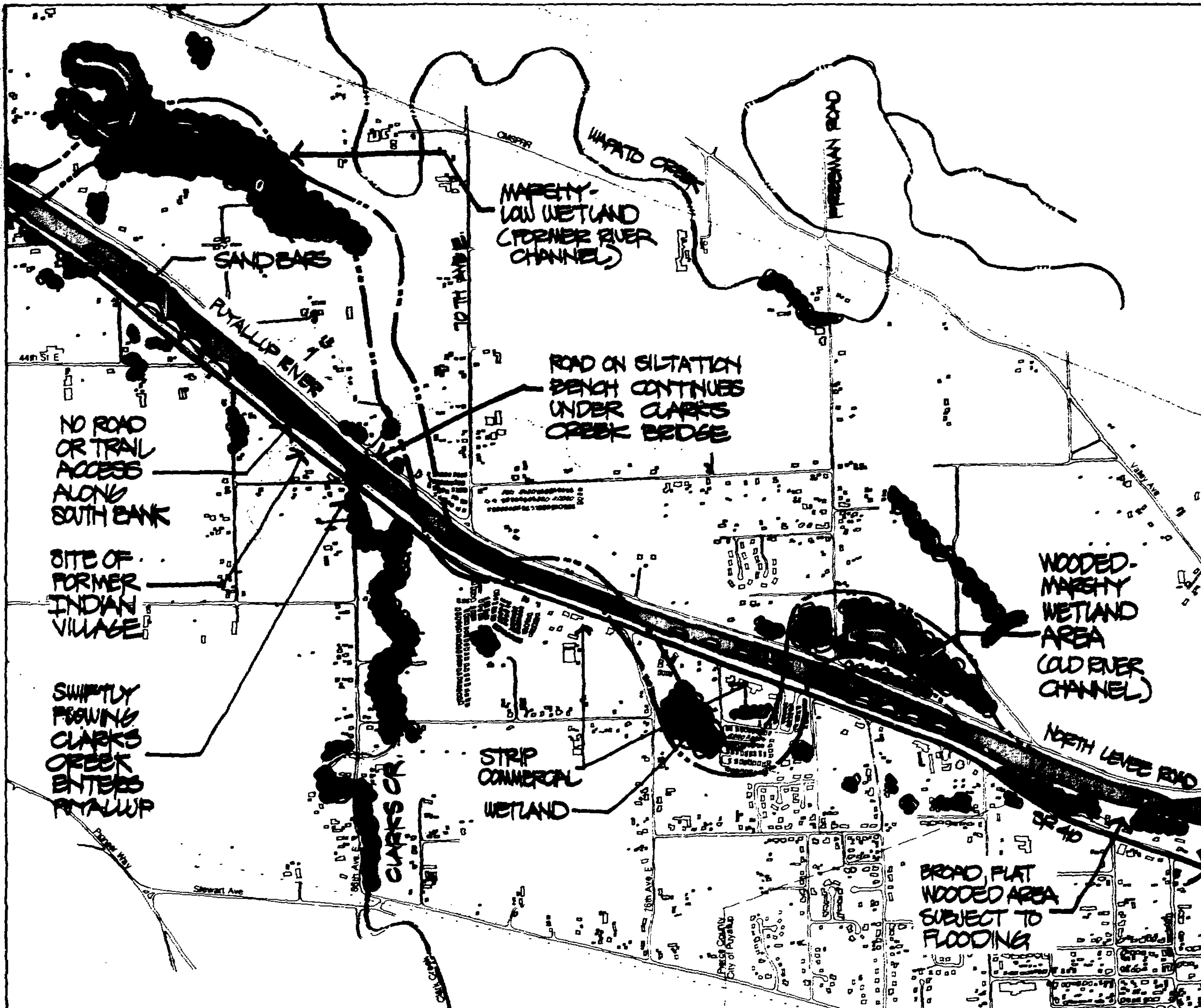
feet
0 400 800 1600

DEPARTMENT OF THE ARMY
SEATTLE DISTRICT CORPS OF ENGINEERS

WHITELEY JACOBSEN AND ASSOCIATES

VISUAL ANALYSIS

2



Puyallup River Project Resource Use Plan

KEY

- ● PEDESTRIAN/VEHICLE CONFLICT
- ⇨ VIEWS
- VEGETATION
- AGRICULTURE/OPEN FIELD
- —·— DRAINAGE
- —··— FORMER RIVER CHANNEL

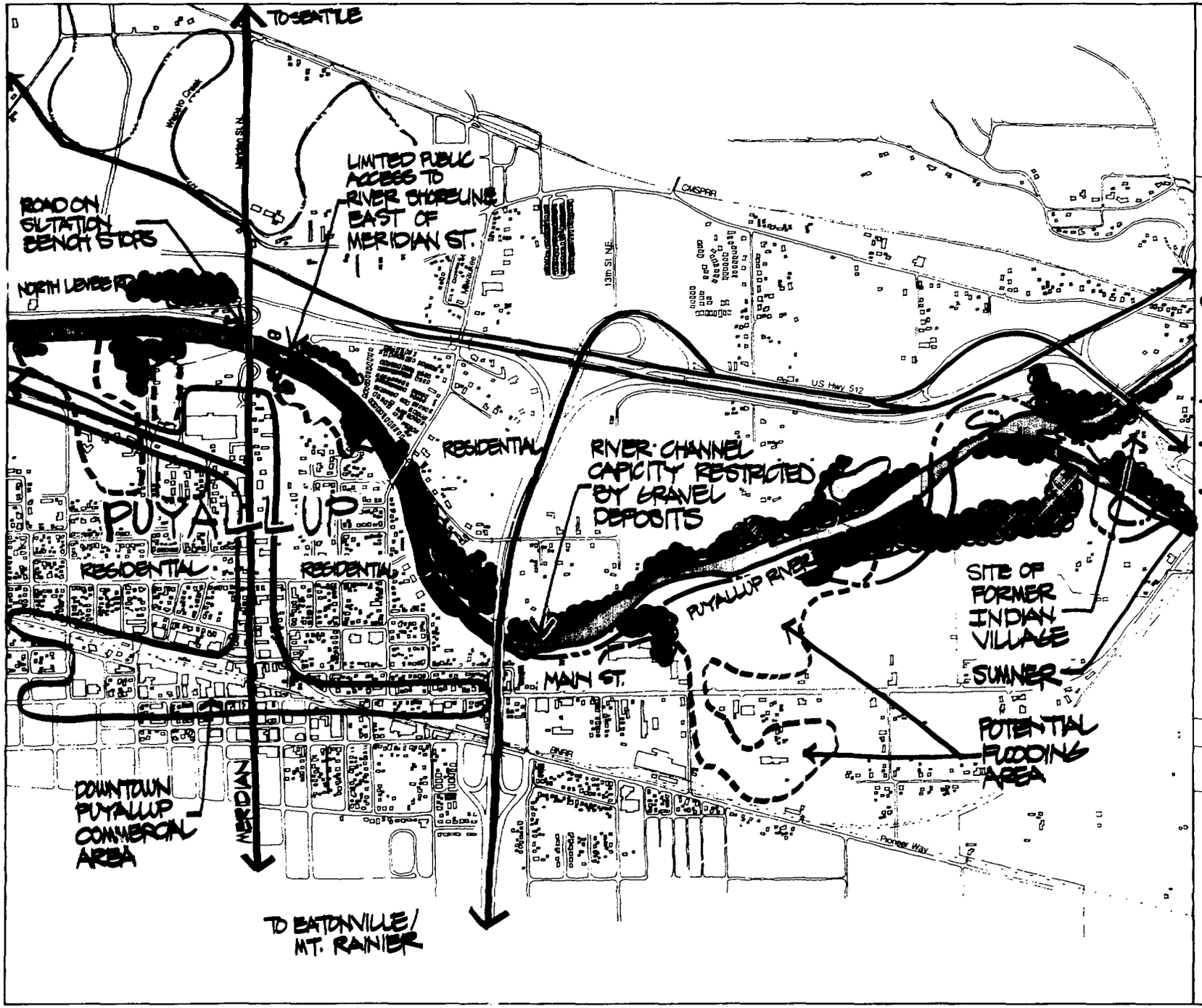
feet 0 400 800 1600

DEPARTMENT OF THE ARMY SEATTLE DISTRICT CORPS OF ENGINEERS

WHITELEY JACOBSEN AND ASSOCIATES

VISUAL ANALYSIS

3



Puyallup River Project Resource Use Plan

KEY

- PEDESTRIAN/ VEHICLE CONFLICT
- VEGETATION
- AGRICULTURE/ OPEN FIELD
- DRAINAGE
- FORMER RIVER CHANNEL
- FLOOD PRONE AREA

feet
0 400 800 1600

DEPARTMENT OF THE ARMY
SEATTLE DISTRICT, CORPS OF ENGINEERS

WHITELEY JUEL JOSEPH AND ASSOCIATES

VISUAL ANALYSIS

4

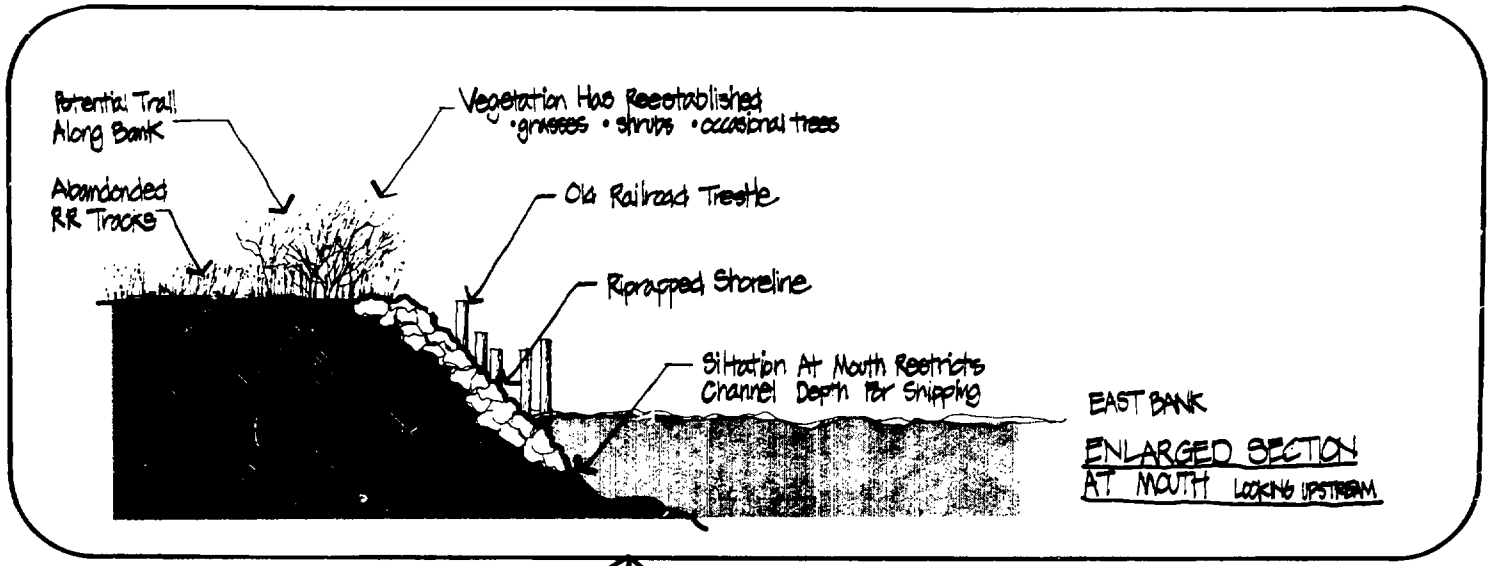
TYPICAL SHORELINE CONDITIONS

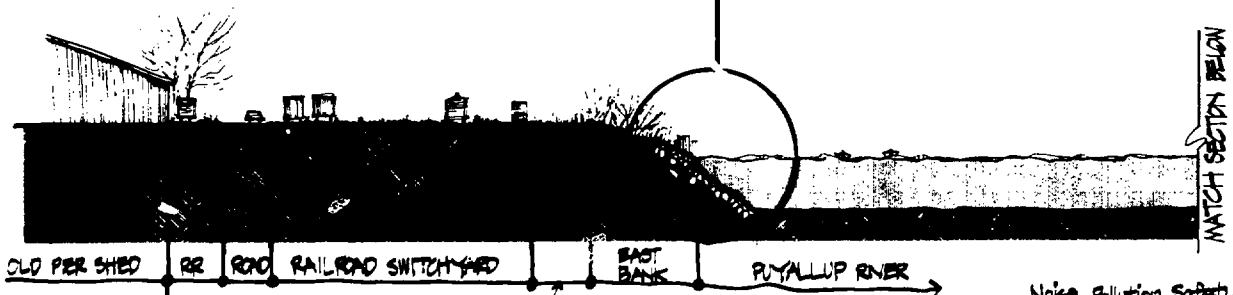
The following sections illustrate typical existing conditions found at various points along the river shoreline.

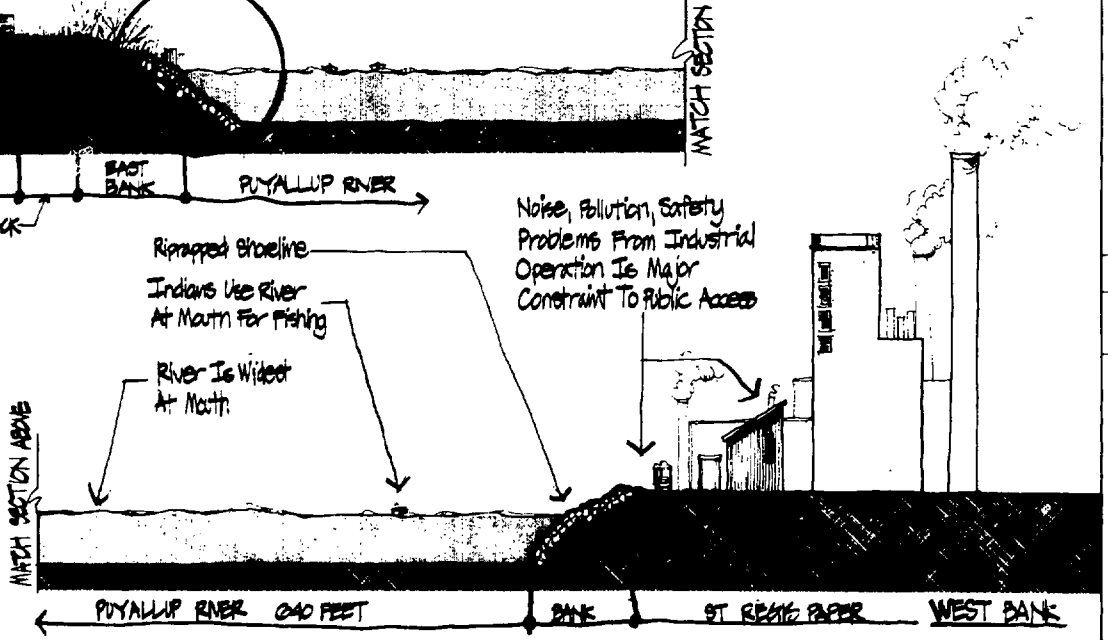
The Mouth

The river is about 600 feet wide at the mouth, its shoreline is heavily rip-rapped and subject to the most extreme tidal fluctuation. The Puyallup Indians use this portion of the river for netting fish. Industries on the west side of the river pose safety and noise problems for potential river users. The area on the east side of the river at the mouth is presently used for a railroad freight yard. The opportunity exists to develop public access along the top of the east bank.

Puyallup River Project Resource Use Plan







SECTION AT MOUTH
LOOKING UPSTREAM

DIAGRAMMATIC SECTIONS
NOT TO SCALE

DEPARTMENT OF THE ARMY
SEATTLE DISTRICT, CORPS OF ENGINEERS

WHITLEY-JACUBSEN AND ASSOCIATES

SECTIONS SHOWING EXISTING CONDITIONS

SHORELINE CONDITIONS

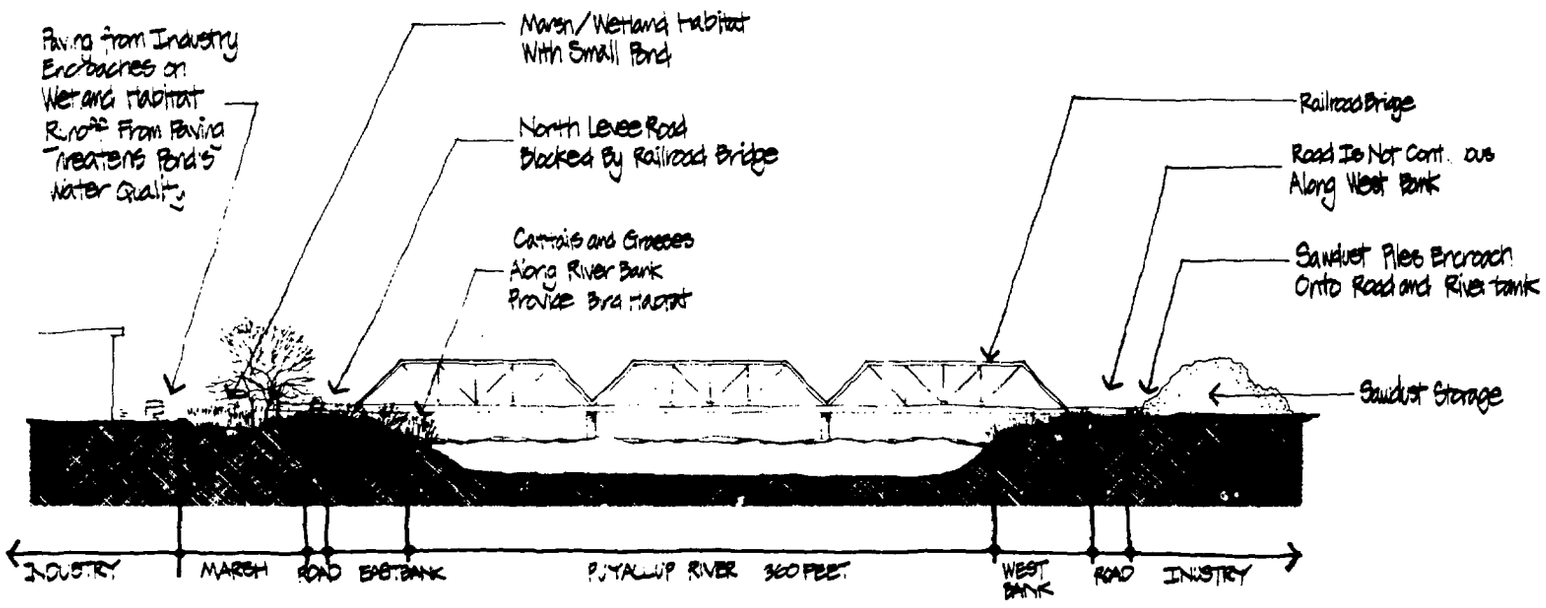
Section 2 - Marsh on Corps Property

This section shows the river adjacent to the Lincoln Avenue bridge. At this point the river is about 350 feet in width with a well-defined levee on each bank. A gravel maintenance road is on the top of each levee. The Corps ownership is largely restricted to the levees themselves. Adjacent industrial uses often encroach on the project. This is especially critical on the east bank where warehouses and asphalt areas seriously threaten a small marsh and wetland habitat.

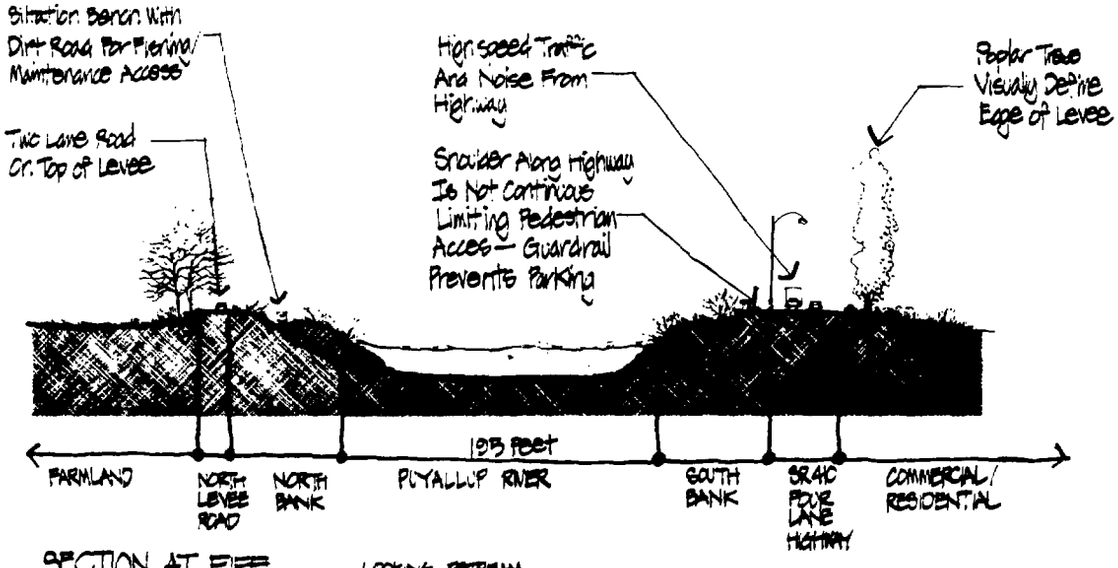
Section 3 - at Fife

At this point the river has narrowed to about 200 feet and there is a significantly different bank condition than exists on the Corps segments of the river. The beginning of the Inter County River Improvement District Flood Control Project is Fife, where extensive siltation deposits along the river side of the levees begin. These deposits have built up to the extent that they form benches from 20 to 50 feet in width. The tops of both levees are used for highways. The north levee is a two lane asphalt road and the south levee is a four lane highway connecting Puyallup and Tacoma. Adjacent land uses are mainly agricultural and rural residential.

Puyallup River Project Resource Use Plan



SECTION AT MARSH LOOKING UPSTREAM



SECTION AT FIFE LOOKING UPSTREAM

SECTIONS SHOWING EXISTING CONDITIONS

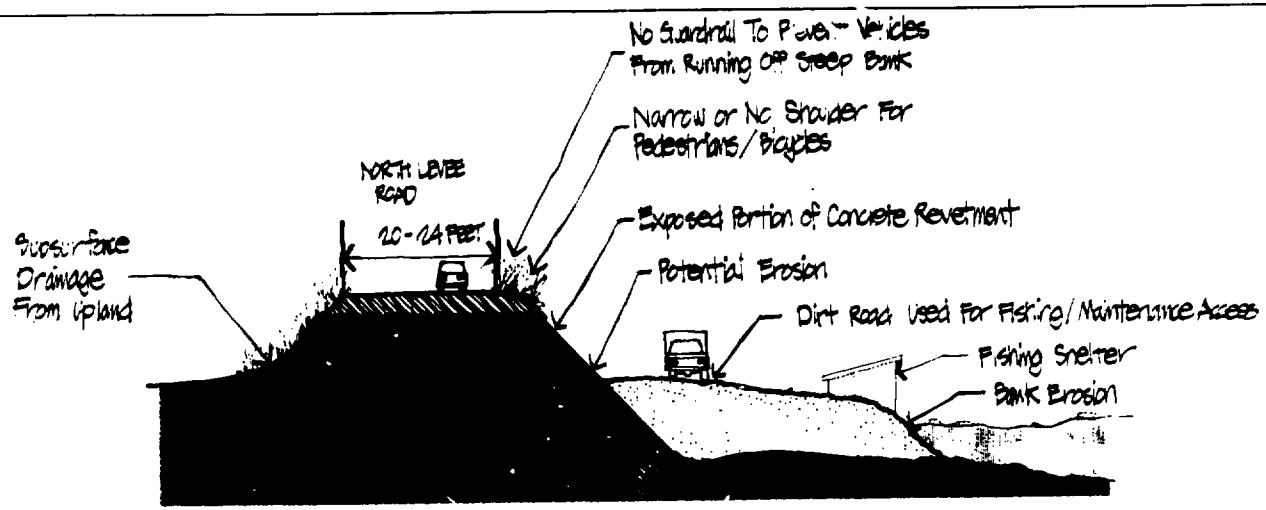
SHORELINE CONDITIONS

Section Through North Levee

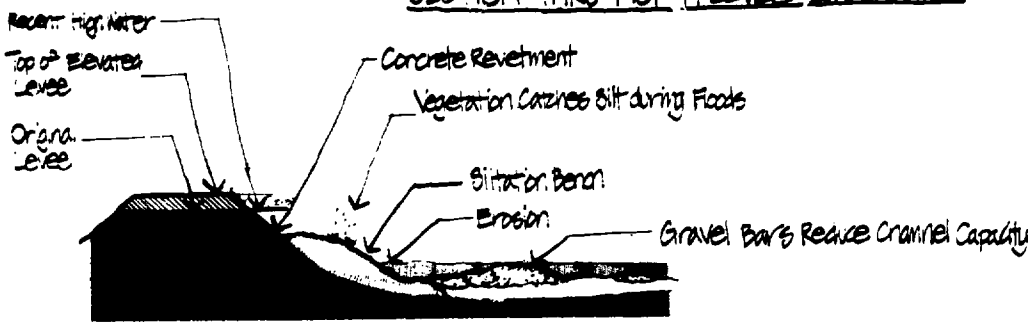
The section drawn through North Levee Road shows the extent of the siltation deposits along the river. When the north and south levees were developed between 1914 and 1928, their banks were stabilized with concrete revetments. Since the development of the levees, silt has built up at a rate of 6 to 12 inches per year to form an extensive bench. This bench varies in width between 20 and 50 feet and is built up to within 12 feet of the top of the levee. Extensive vegetation has established along the top of the siltation bench. A dirt road has been graded along the siltation bench levee to provide access for levee maintenance by the Inter County River Improvement District. Access to this road is gained by earth ramps along the revetment from North Levee Road. Extensive use of the siltation bench is made by the public for fishing access.

Clarks Creek

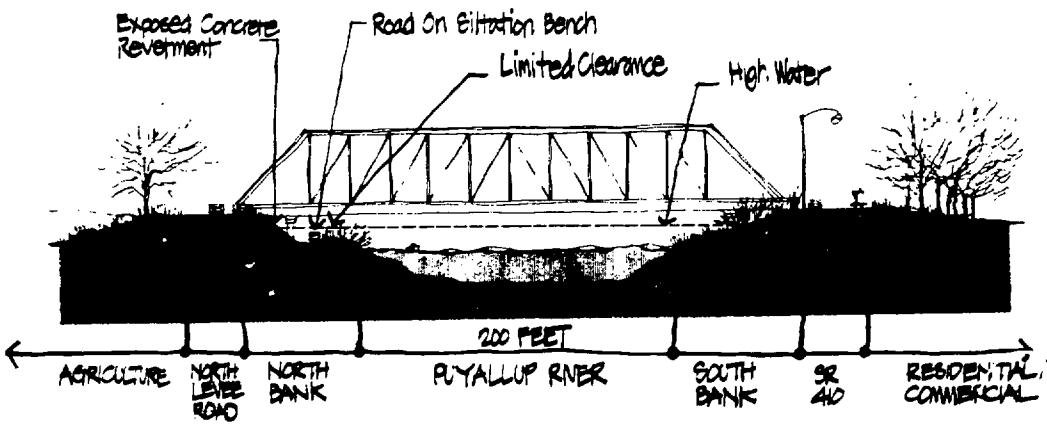
This section shows the typical bank conditions at Clarks Creek. At this point the siltation bench and road pass under the Clarks Creek bridge on the north side of the river. This section shows that there is no road on the siltation bench on the south side of the river. The section also indicates that high water, which occurs annually, could completely cover the siltation bench and come within one or two feet of the top of the levee.



SECTION THRU NORTH LEVEE LOOKING UPSTREAM



SECTION THRU NORTH LEVEE



SECTION AT CLARKS CREEK
LOOKING UPSTREAM

SECTIONS SHOWING EXISTING CONDITIONS

OWNERSHIP/RIGHTS

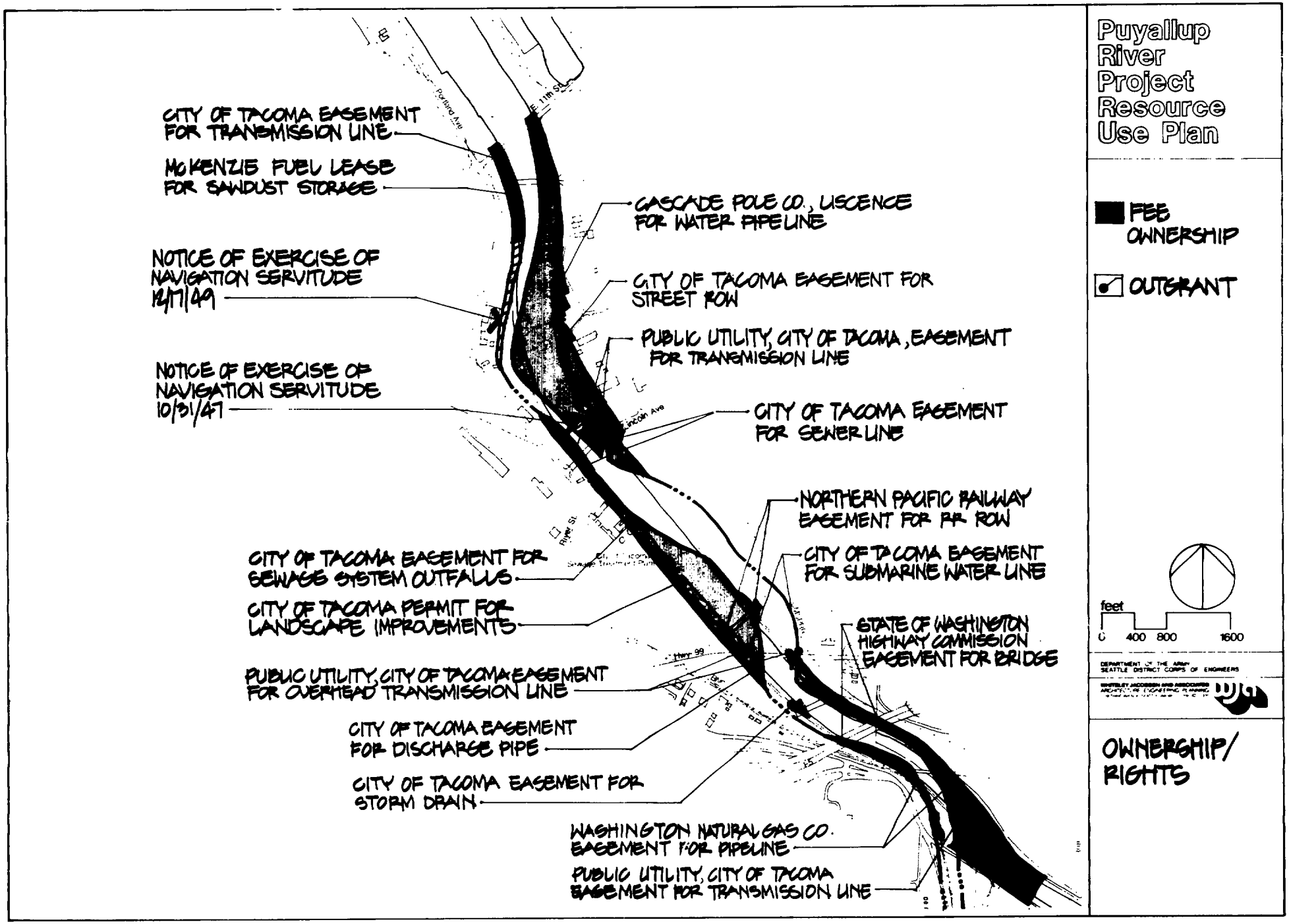
Corps of Engineers Project

There are two categories of government rights which apply to the Corps' Flood Control Project. One category is fee simple ownership. When the project was developed in the 1940's some land was acquired in fee simple in order to realign the river channel. A second category applies to Navigation Servitude. The United States Government has full rights of navigation and flood control activities on all former river beds, even if it does not own the land.

A classification of usage which applies to non-federal use of land on federal property is called an outgrant. The federal government grants easements, leases and permits of varying duration to local agencies or private individuals for specific uses on federally owned land.

Inter County River Improvement District

The Inter County River Improvement District owns the north levee including North Levee Road. It owns one or two of the low wet former channel areas adjacent to North Levee Road and owns the south levee to the center line of SR 410.


CITY OF TACOMA EASEMENT FOR TRANSMISSION LINE
McKENZIE FUEL LEASE FOR SAWDUST STORAGE
NOTICE OF EXERCISE OF NAVIGATION SERVITUDE 12/7/49
NOTICE OF EXERCISE OF NAVIGATION SERVITUDE 10/31/47
CASCADE POLE CO., LISCENCE FOR WATER PIPELINE
CITY OF TACOMA EASEMENT FOR STREET ROW
PUBLIC UTILITY, CITY OF TACOMA, EASEMENT FOR TRANSMISSION LINE
CITY OF TACOMA EASEMENT FOR SEWER LINE
NORTHERN PACIFIC RAILWAY EASEMENT FOR RR ROW
CITY OF TACOMA EASEMENT FOR SUBMARINE WATER LINE
CITY OF TACOMA EASEMENT FOR SEWAGE SYSTEM OUTFALLS
CITY OF TACOMA PERMIT FOR LANDSCAPE IMPROVEMENTS
STATE OF WASHINGTON HIGHWAY COMMISSION EASEMENT FOR BRIDGE
PUBLIC UTILITY, CITY OF TACOMA EASEMENT FOR OVERHEAD TRANSMISSION LINE
CITY OF TACOMA EASEMENT FOR DISCHARGE PIPE
CITY OF TACOMA EASEMENT FOR STORM DRAIN
WASHINGTON NATURAL GAS CO. EASEMENT FOR PIPELINE
PUBLIC UTILITY, CITY OF TACOMA EASEMENT FOR TRANSMISSION LINE
E 11th St
Portland Ave
Lincoln Ave
River St
Hwy 99
Puyallup River Project Resource Use Plan
FEE OWNERSHIP
OUTGRANT
feet
0 400 800 1600
DEPARTMENT OF THE ARMY SEATTLE DISTRICT CORPS OF ENGINEERS
OWNERSHIP/ RIGHTS

SHORELINE MASTER PROGRAM

The Shoreline Master Program is mandated by the State Legislature and provides for shoreline protection and planning within 200 feet of all major water bodies, streams and rivers in the state. Each county and local jurisdiction under the state act must develop a master program for its shorelines. In addition, the State has designated shorelines which it considers to be of state wide significance. The Puyallup River is a designated shoreline of statewide significance. The State's criteria for Shorelines of Statewide Significance include:

- Statewide interests must be protected over local interests.
- Natural character should be preserved.
- Planning should be for long range over short-term benefit.
- Ecological resources should be protected.
- Public access to publicly owned shorelines should be increased.
- Public recreational opportunities should be increased.

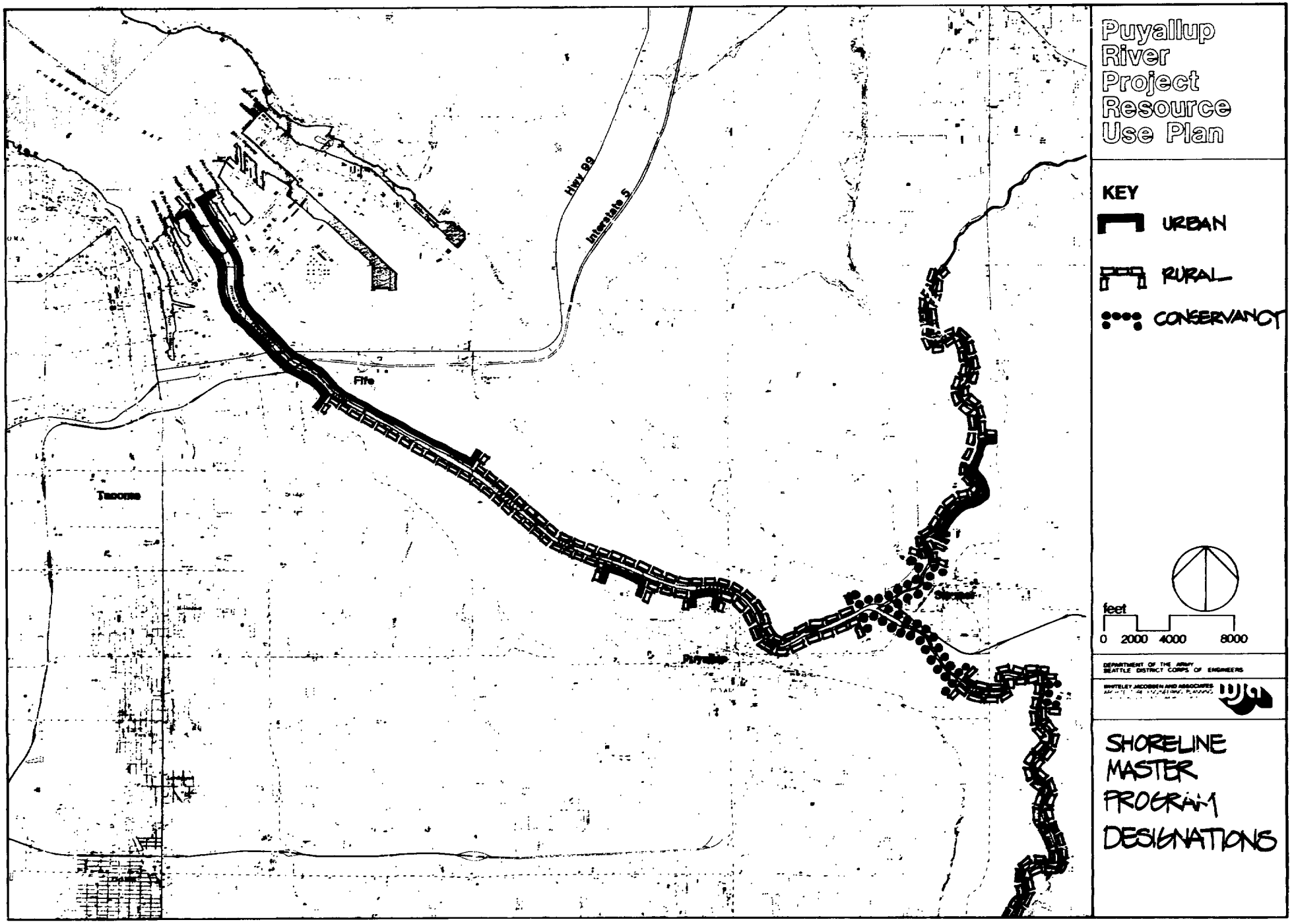
Three shoreline use categories have been designated for the Puyallup River by the Shoreline Master Programs developed by Tacoma and Pierce County:

<u>The Urban Environment</u> - "Increasing industrial development may fill much of the area adjacent to the diked Puyallup River within Tacoma. But special use should be made of remaining local and federal properties to take advantage of the unique recreation advantages offered by a generally undeveloped river front in an urban setting. A study for pedestrian and bicycle trails along the dike should be undertaken."(4)

Preferred urban uses include: Aquaculture, Commercial/Industrial Development, Utilities, Land Fill, Shoreline Protection (Stream), Roads, Railroads, Bridges, Educational, Archeological, Historical Sites, Water Related/Dependent Recreation

The Rural Environment - This category is intended to protect agricultural land from urban development. Preferred uses include intensive agriculture, intensive recreational, and low density residential.

The Conservancy Environment - This category is intended to protect and conserve the natural, cultural and historic resources. The category includes areas of steep slope, erosion, and hazard. Preferred uses include outdoor recreation and passive agriculture.


Puyallup River Project Resource Use Plan
KEY
URBAN
RURAL
CONSERVANCY
Hwy 99
Interstate 5
Fife
Tacoma
Sumner
Puyallup
feet
0 2000 4000 8000
DEPARTMENT OF THE ARMY
SEATTLE DISTRICT CORPS OF ENGINEERS
WHITELEY JACOBSEN AND ASSOCIATES
SHORELINE MASTER PROGRAM DESIGNATIONS

ENVIRONMENTAL FACTORS

Because of the conceptual nature of this study in-depth assessments of impacts on a site-by-site basis for potential recreational developments, were not conducted. Preliminary analysis has provided information on ecologically valuable and sensitive areas where recreational development would either be ruled out, or undertaken with only the greatest of care to insure resource integrity. Alternately, through analysis other areas have been identified where such preliminary analysis will be documented in an environmental assessment or environmental impact statement, as appropriate, during refinement of concept plans in Phase II studies.

Critical/Important Habitat Areas

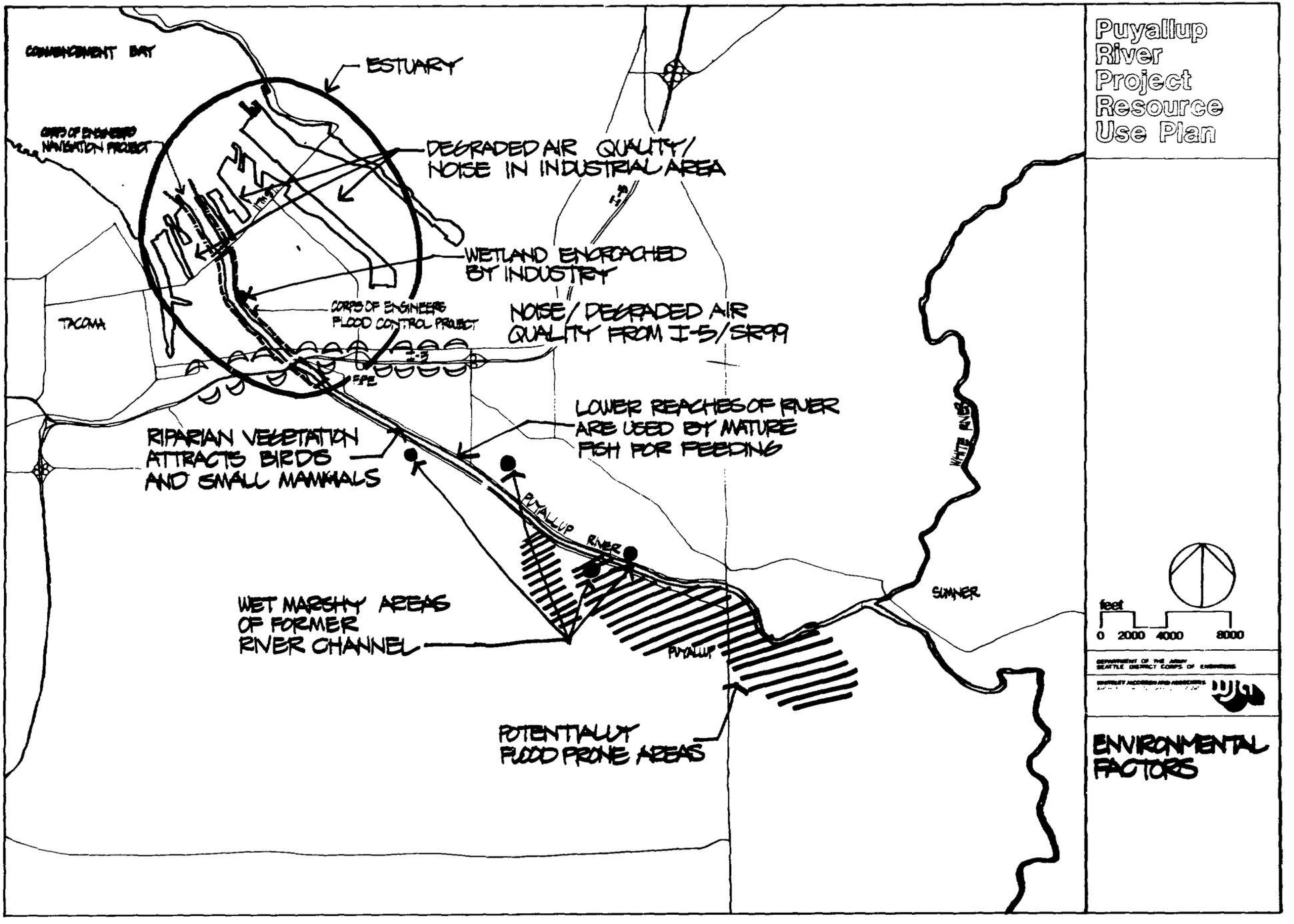
There are numerous wetland areas along the Puyallup that provide habitats for birds and other wildlife. Within the Corps of Engineers Project there is a wetland area with a small marsh/pond. This wetland is being seriously encroached upon by adjacent industrial uses. The environmental map shows the locations of various wetland areas. These are primarily former river channel low areas which have not been developed for agricultural or other uses because they are low and wet.

Water Quality

The river's swift current and turbidity due to siltation generally make it unsuitable for aquatic recreation activities such as swimming and water skiing. In addition there are major discharges into the river such as the City of Tacoma sewage treatment plant, that could possibly pose a health hazard to human use of the water.

Air Quality

The primary contributors to air pollution in the project area are mills near East 11th Street and the Interstate 5 freeway. Interstate 5 is a fairly constant source of carbon monoxide and various other forms of auto pollution, such as dust and particulate matter.


COMMENCEMENT BAY
ESTUARY
CORPS OF ENGINEERS NAVIGATION PROJECT
DEGRADED AIR QUALITY/ NOISE IN INDUSTRIAL AREA
WETLAND ENCROACHED BY INDUSTRY
TACOMA
CORPS OF ENGINEERS FLOOD CONTROL PROJECT
NOISE/ DEGRADED AIR QUALITY FROM I-5/SR99
LOWER REACHES OF RIVER ARE USED BY MATURE FISH FOR FEEDING
RIPARIAN VEGETATION ATTRACTS BIRDS AND SMALL MAMMALS
PUYALLUP RIVER
WHITE RIVER
SUMNER
WET MARSHY AREAS OF FORMER RIVER CHANNEL
PUYALLUP
POTENTIALLY FLOOD PRONE AREAS
Puyallup River Project Resource Use Plan
feet
0 2000 4000 8000
ENVIRONMENTAL FACTORS

HISTORICAL, CULTURAL, ARCHEOLOGICAL SITES

The Puyallup River has a rich cultural history which has been almost totally obliterated by developments over the last eighty years. Evidence of history up until white settlement has been covered over by recent urban growth. This description and the accompanying map are meant only as preliminary observations regarding the existence of cultural and archeological features and historical/resources within the study area. Preliminary analysis indicates that direct adverse impacts of development, if pursued from the conceptual framework contained in this study will have little effect on cultural or prehistoric/historic resources known to exist within the boundaries of the Federally operated and maintained project. Identification and evaluation of yet unknown cultural resources within the Federal project limits and an assessment of project impacts on them will be required during refinement of concept plans in Phase II studies.

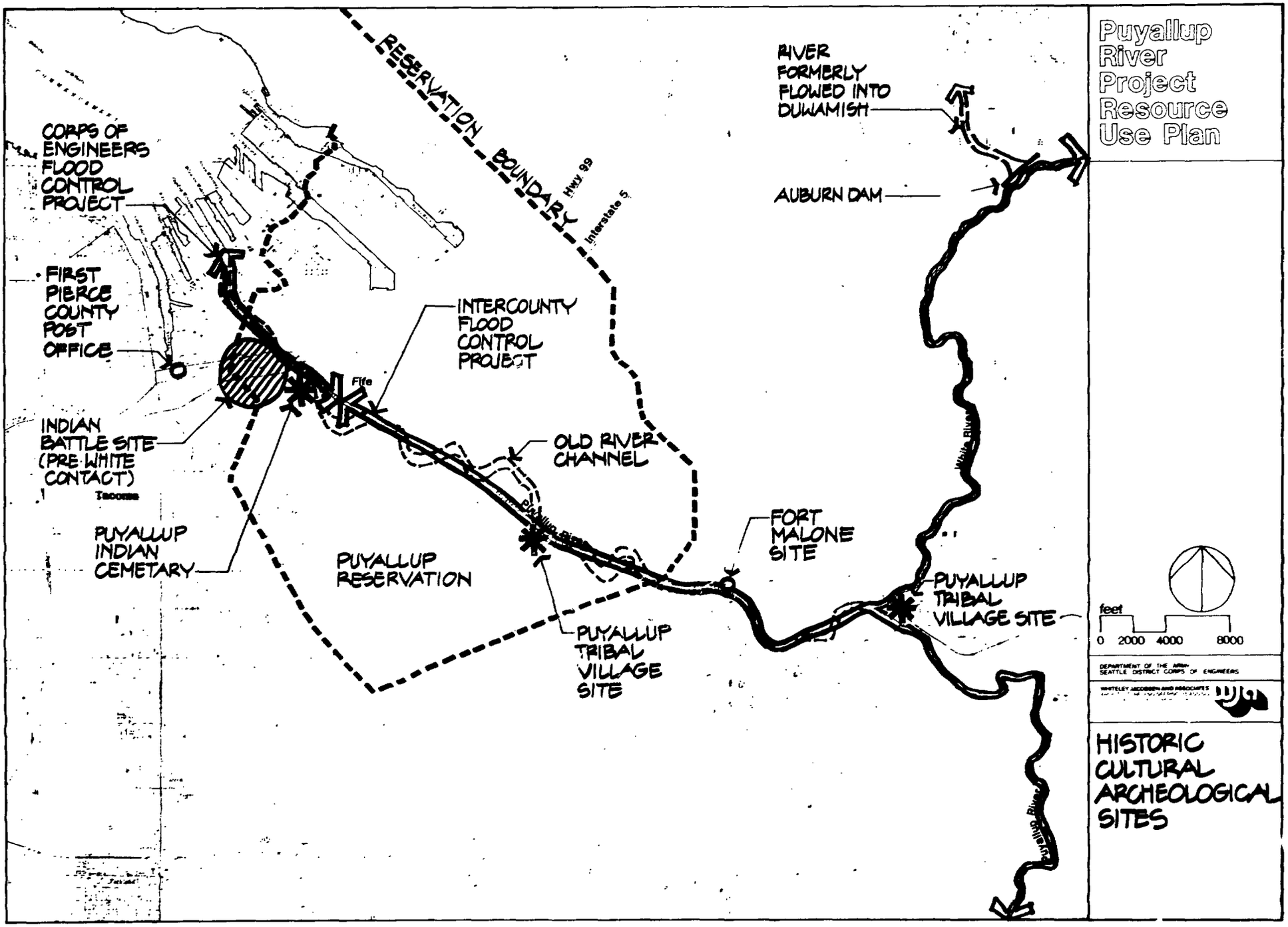
Archeological Sites

The accompanying map shows the location of major tribal sites. There were village settlement areas at Clarks Creek and at Sumner. A major Indian cemetary was located in the vicinity of Interstate 5 and the Puyallup River. Also shown is the location of an Indian battle which occurred before white settlement. Probably the most significant historic feature is an Indian reservation boundary designated by the Medicine Creek Treaty of 1854.

The Medicine Creek Treaty was agreed to by the Territory of Washington and the government of the United States and delegates of the Nisqually, Puyallup, Steilacoom, Squawskin, S'Homamish, Stehchass, TiTeeksin, Squi-ailt, and Sa-heah-wamish Tribes, and groups of Indians occupying the lands lying around the head of Puget Sound and adjacent inlets. The Medicine Creek Treaty is significant because it guarantees the Indians the right of taking fish at all usual and accustomed grounds and stations. It also guarantees the right to erect temporary houses for the purpose of curing, together with the privilege of hunting, gathering roots and berries, and pasturing their horses on open and unclaimed lands.(5)

Historical Features

The map shows the location of the first Pierce County post office and site of Fort Malone.


Puyallup River Project Resource Use Plan
RESERVATION BOUNDARY
Hwy. 99
Interstate 5
RIVER FORMERLY FLOWED INTO DUWAMISH
AUBURN DAM
CORPS OF ENGINEERS FLOOD CONTROL PROJECT
FIRST PIERCE COUNTY POST OFFICE
INTERCOUNTY FLOOD CONTROL PROJECT
Fife
INDIAN BATTLE SITE (PRE-WHITE CONTACT)
Tacoma
OLD RIVER CHANNEL
White River
PUYALLUP INDIAN CEMETARY
PUYALLUP RESERVATION
FORT MALONE SITE
PUYALLUP TRIBAL VILLAGE SITE
PUYALLUP TRIBAL VILLAGE SITE
feet
0 2000 4000 8000
DEPARTMENT OF THE ARMY SEATTLE DISTRICT CORPS OF ENGINEERS
WHITELEY MCCOBEN AND ASSOCIATES
HISTORIC CULTURAL ARCHEOLOGICAL SITES

RECREATION

Existing Facilities

This map shows that with the exception of Swan Creek Park near Tacoma and a small park in the City of Puyallup there are few recreational facilities along the Puyallup. There is one existing bicycle path that crosses the Puyallup River at East 11th Street.

Proposed Facilities

The County Recreation Plan proposes major facilities to be located at Swan Creek. In addition, the plan calls for development of a bicycle trail between Fife and Sumner along North Levee Road.

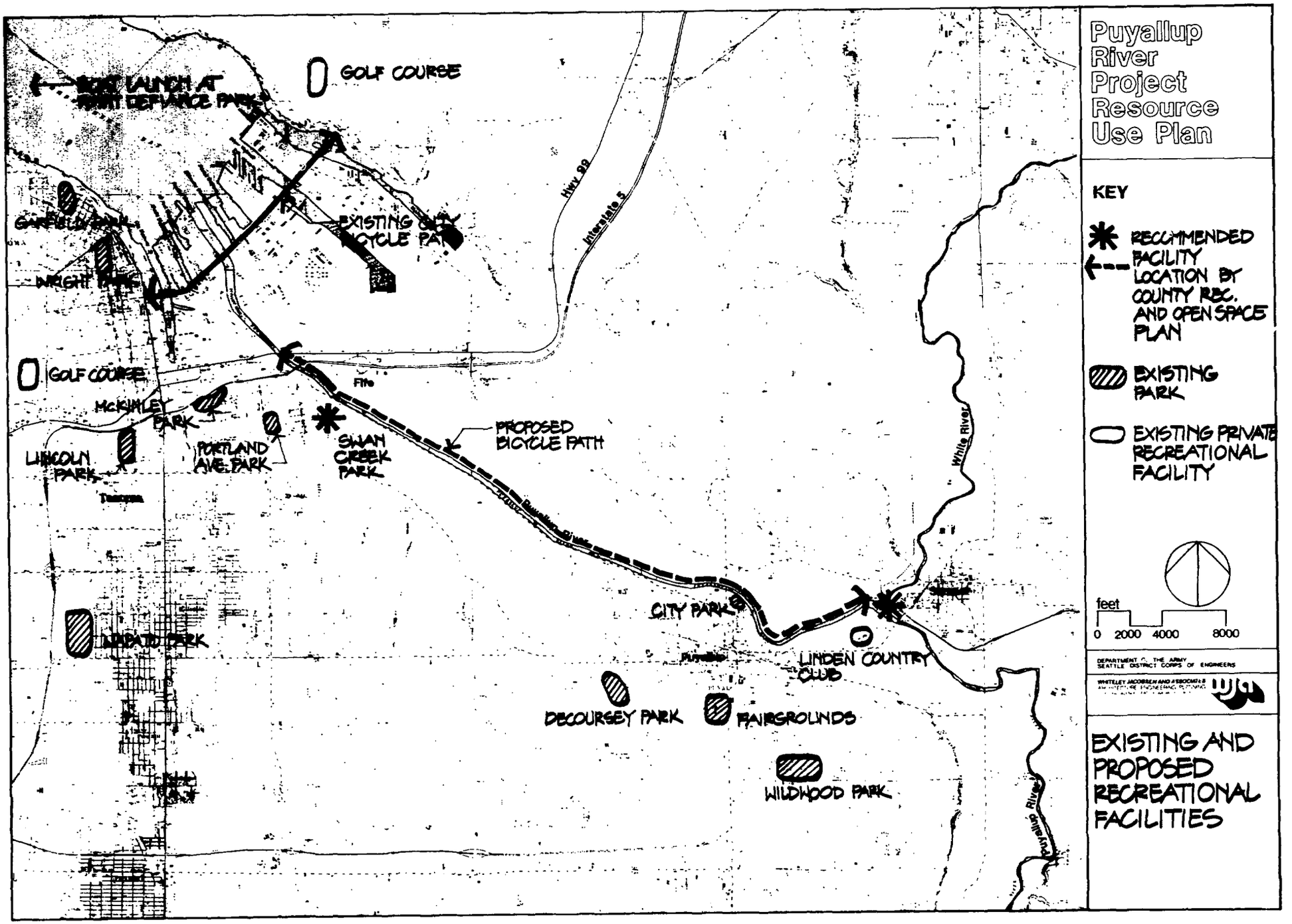
Recreation Need

The Pierce County Comprehensive Park and Recreation System Plan states:

> "By comparing the supply with demand for recreation areas and facilities it becomes apparent that there is existing need to acquire 653 acres of small urban park land and 470 acres of large urban park lands in the county at the present time. Most of the need for a small urban park land is in the developing suburban areas surrounding Tacoma and for the acquisition and development of large urban park land with shoreline facilities, both salt water and fresh water, in areas accessible to the population. In addition there is an increasing need to develop a trail system and preserve a substantial amount of open space in the urbanizing areas of the county."(6)

In addition to projecting the need for parks and trails in urban areas, including a multi-use recreational trail along the Puyallup, the County Recreation Plan identified the need to develop a scenic road linking Puyallup with Mt. Rainier. The plan proposed that this loop road begin at Interstate 5 with access to Interstate 5, would follow the Puyallup River, and thread through the chain of lakes between Lake Kapowsin and Alder Lake.

Presently, the City of Tacoma Public Works Department is analyzing the feasibility of a recreation trail along the river between Puyallup and Tacoma. The desirability of a trail and a boat launch at East 11th Street has been expressed by Bob Wallar, planner for the Puyallup Indian Tribe.


Puyallup River Project Resource Use Plan
KEY
RECOMMENDED FACILITY LOCATION BY COUNTY REC. AND OPEN SPACE PLAN
EXISTING PARK
EXISTING PRIVATE RECREATIONAL FACILITY
feet
0 2000 4000 8000
DEPARTMENT OF THE ARMY SEATTLE DISTRICT CORPS OF ENGINEERS
WHITELEY JACOBSEN AND ASSOCIATES
EXISTING AND PROPOSED RECREATIONAL FACILITIES
BOAT LAUNCH AT POINT DEFIANCE PARK
GOLF COURSE
GARFIELD PARK
WRIGHT PARK
EXISTING CITY BICYCLE PATH
Hwy 99
Interstate 5
GOLF COURSE
McKINLEY PARK
LINCOLN PARK
PORTLAND AVE. PARK
SWAN CREEK PARK
PROPOSED BICYCLE PATH
Puyallup River
White River
CITY PARK
LINDEN COUNTRY CLUB
DECOURSEY PARK
FAIRGROUNDS
WILDWOOD PARK
Puyallup River

PLANS AND PROJECTS OF PUBLIC AGENCIES

Port of Tacoma

The Port has long range plans to acquire the Milwaukee Ocean Dock once the railroad has completed its new switching facility near Interstate 5. The Port would develop the Milwaukee dock as a container facility. This development would entail filling in the Milwaukee Waterway and dredging the adjacent waterway, Commencement Bay,to allow ships to berth. The port also wants to develop a bulk conveyor from the site to storage facilities to be located south of East 11th Street. A second project desired by the Port of Tacoma is development of a limited access freeway between the I-5 spur at Tacoma and Northeast Tacoma.

State Department of Transportation/City of Tacoma

A freeway spur is planned to connect Interstate 5 with downtown Tacoma.

Milwaukee Railroad

Prior to declaring bankruptcy, the railroad began development of a new freight yard/switching terminal between Interstate Five and the Puyallup River at Fife. Development of the switchyard has stopped pending disposition of the railroads assets.

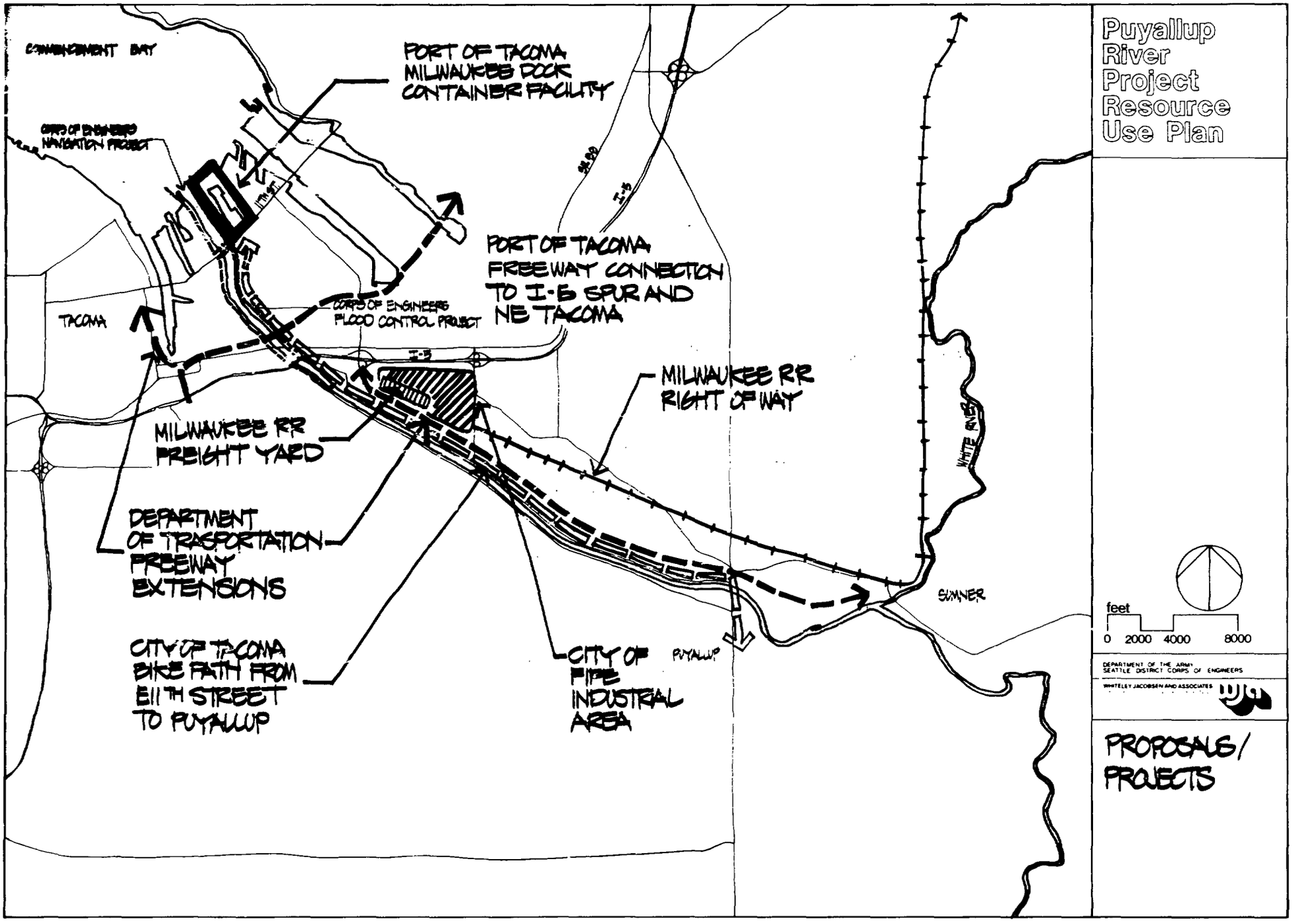
City of Fife

About half of the land within the City of Fife had been zoned for industrial development. This land is located between Interstate 5 and the Puyallup River.

Department of Transportation

The State plans to develop freeway connections between Interstate 5 and the City of Puyallup. These proposed highways would run parallel to the Puyallup River and will either be located along North Levee Road or along the south bank of the river.

An analysis of the information presented in the inventory phase is undertaken in this section to identify problems, opportunities and resource potential of the study area.


Puyallup River Project Resource Use Plan
COMMENCEMENT BAY
PORT OF TACOMA MILWAUKEE DOCK CONTAINER FACILITY
CORPS OF ENGINEERS NAVIGATION PROJECT
PORT OF TACOMA FREEWAY CONNECTION TO I-5 SPUR AND NE TACOMA
TACOMA
CORPS OF ENGINEERS FLOOD CONTROL PROJECT
I-5
MILWAUKEE RR RIGHT OF WAY
MILWAUKEE RR FREIGHT YARD
WHITE RIVER
DEPARTMENT OF TRASPORTATION FREEWAY EXTENSIONS
SUMNER
CITY OF TACOMA BIKE PATH FROM E11TH STREET TO PUYALLUP
CITY OF PUYALLUP INDUSTRIAL AREA
PUYALLUP
feet
0 2000 4000 8000
DEPARTMENT OF THE ARMY SEATTLE DISTRICT CORPS OF ENGINEERS
WHITELEY JACOBSEN AND ASSOCIATES
PROPOSALS/ PROJECTS

The primary resource objective of the Puyallup River Flood Control Project is that of flood protection for the Tacoma Industrial area. The river's resources may also be utilized for recreation, interpretation, fisheries enhancement, wildlife habitat protection, and other development when compatible with the flood control objective.

3. PROBLEMS, OPPORTUNITIES & RESOURCE POTENTIAL

PROBLEMS

- Existing land uses largely ignore the presence of the river as an amenity.
- Public access to the river shoreline is constrained by industrial development, highways and railroads. Where public access is allowed to occur it is restricted to gravel roads on the Corps Project and siltation banks between the levee and the water edge on the Inter County River Improvement District Project.
- On the lower sections of the river numerous bridges pose conflicts with pedestrian/bicycle travel along the roads on top of the levees.
- There is little visual definition of the river edge. The flatness of the Puyallup Valley and the surrounding commercial and industrial development largely camouflage the Puyallup from surrounding roads and residential areas.
- The river has been denied its natural function of a linkage for the various activities in the valley.
- Except for informal use of the siltation benches for fishing there is almost no recreational use of the river.
- There has been little preservation and interpretation of archeological, historical or cultural features along the river.

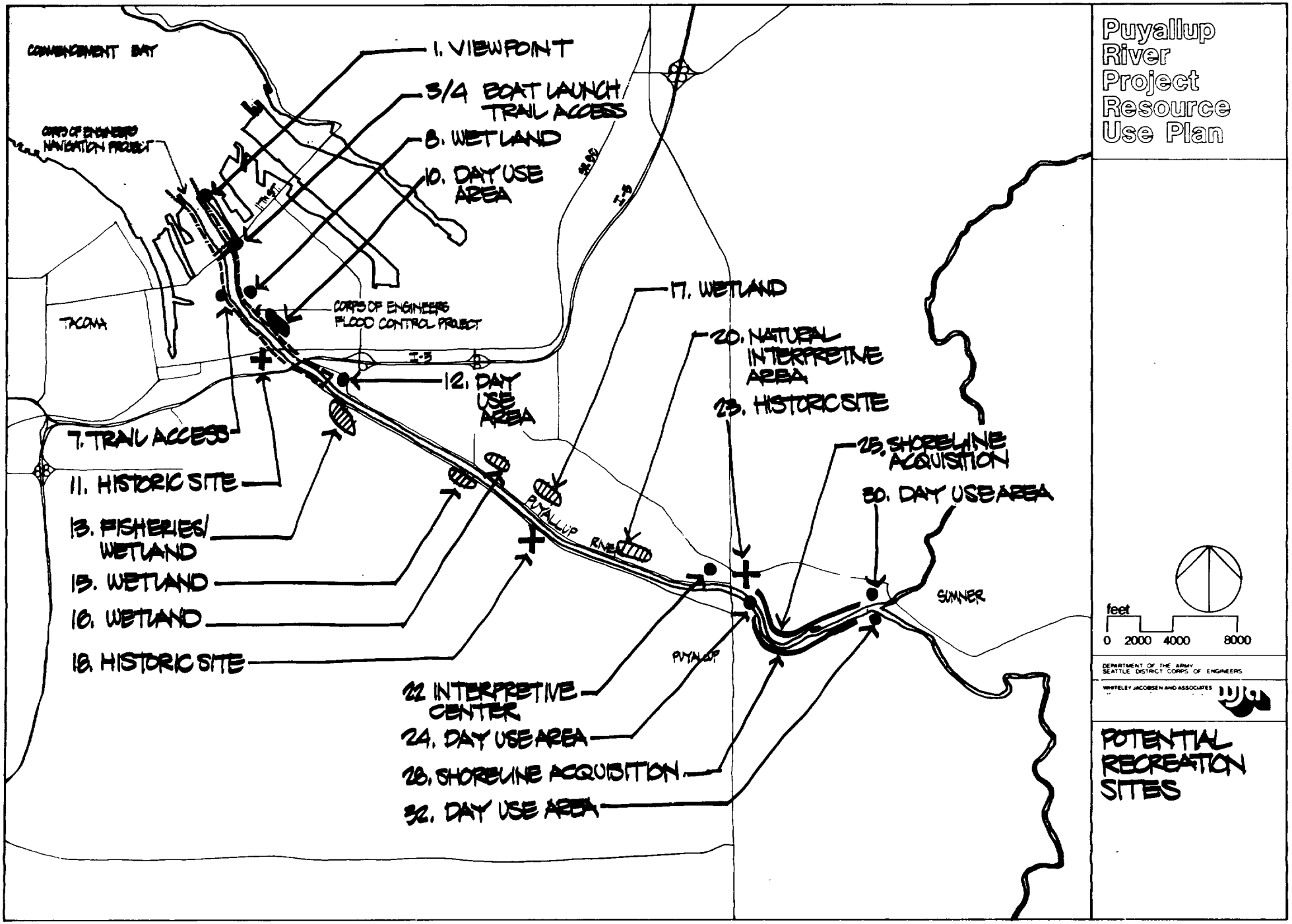
OPPORTUNITIES

- Development of a trail system linking Sumner, Puyallup, Fife and Tacoma along the Puyallup River shoreline on lands owned by the Corps of Engineers and the Inter County River Improvement District.
- Development of small passive recreational areas.
- Revision of land use plans for the areas adjacent to the Puyallup to take advantage of the river as a visual and recreational amenity. For example, utilization of the Port of Tacoma industrial area for light manufacturing uses rather than for storage of bulk commodities.
- Enhancement and protection of existing wetland/natural areas to serve as wildlife habitats and natural areas for education/interpretation.
- Development of facilities for launching small boats in the vicinity of East 11st Street.
- Development of interpretive displays and exhibits describing the river's rich archeological, cultural, and historical features.

POTENTIAL RECREATION SITES

Thirty-two sites are identified for potential recreational development. The sites range in capability from small passive day use areas such as the potential viewpoint at the mouth of the Puyallup, to major public access points such as under the East 11th Street Bridge with provision for parking facilities, restrooms and day use activities.

In general, sites are identified on existing publicly owned lands. In a few cases sites were identified on private land to provide greater public access to the river shoreline.


COMMENCEMENT BAY
CORPS OF ENGINEERS NAVIGATION PROJECT
TACOMA
CORPS OF ENGINEERS FLOOD CONTROL PROJECT
I-5
PUYALLUP RIVER
SUMNER
PUYALUP
1. VIEWPOINT
3/4 BOAT LAUNCH TRAIL ACCESS
8. WETLAND
10. DAY USE AREA
17. WETLAND
20. NATURAL INTERPRETIVE AREA
23. HISTORIC SITE
25. SHORELINE ACQUISITION
30. DAY USE AREA
12. DAY USE AREA
7. TRAIL ACCESS
11. HISTORIC SITE
13. FISHERIES/ WETLAND
15. WETLAND
16. WETLAND
18. HISTORIC SITE
22 INTERPRETIVE CENTER
24. DAY USE AREA
28. SHORELINE ACQUISITION
32. DAY USE AREA
Puyallup River Project Resource Use Plan
feet
0 2000 4000 8000
DEPARTMENT OF THE ARMY
SEATTLE DISTRICT CORPS OF ENGINEERS
WHITELEY JACOBSEN AND ASSOCIATES
POTENTIAL RECREATION SITES

POTENTIAL RECREATION TRAILS

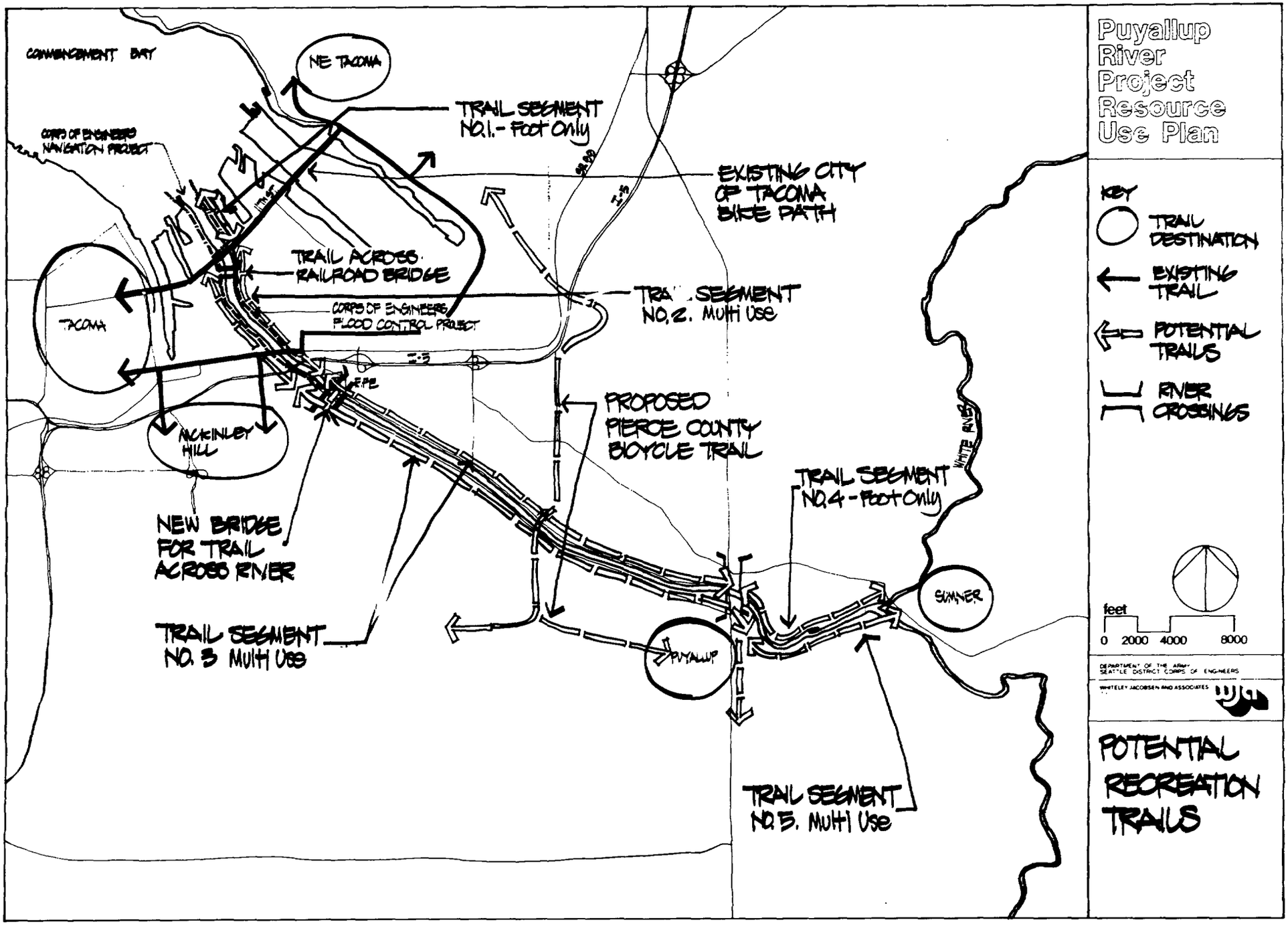
North Side of the River

There is the potential to develop a multiple use trail for walkers, joggers and non-motorized cyclists from the Mouth, along North Levee Road to the City of Puyallup. Continuation of the trail from Puyallup to Sumner would entail acquisition of private property. Development of the trail from East 11th Street to Puyallup could be accomplished entirely within public right-of-way. Development of the trail from East 11th Street to the mouth would require acquisition of private property.

South Side of the River

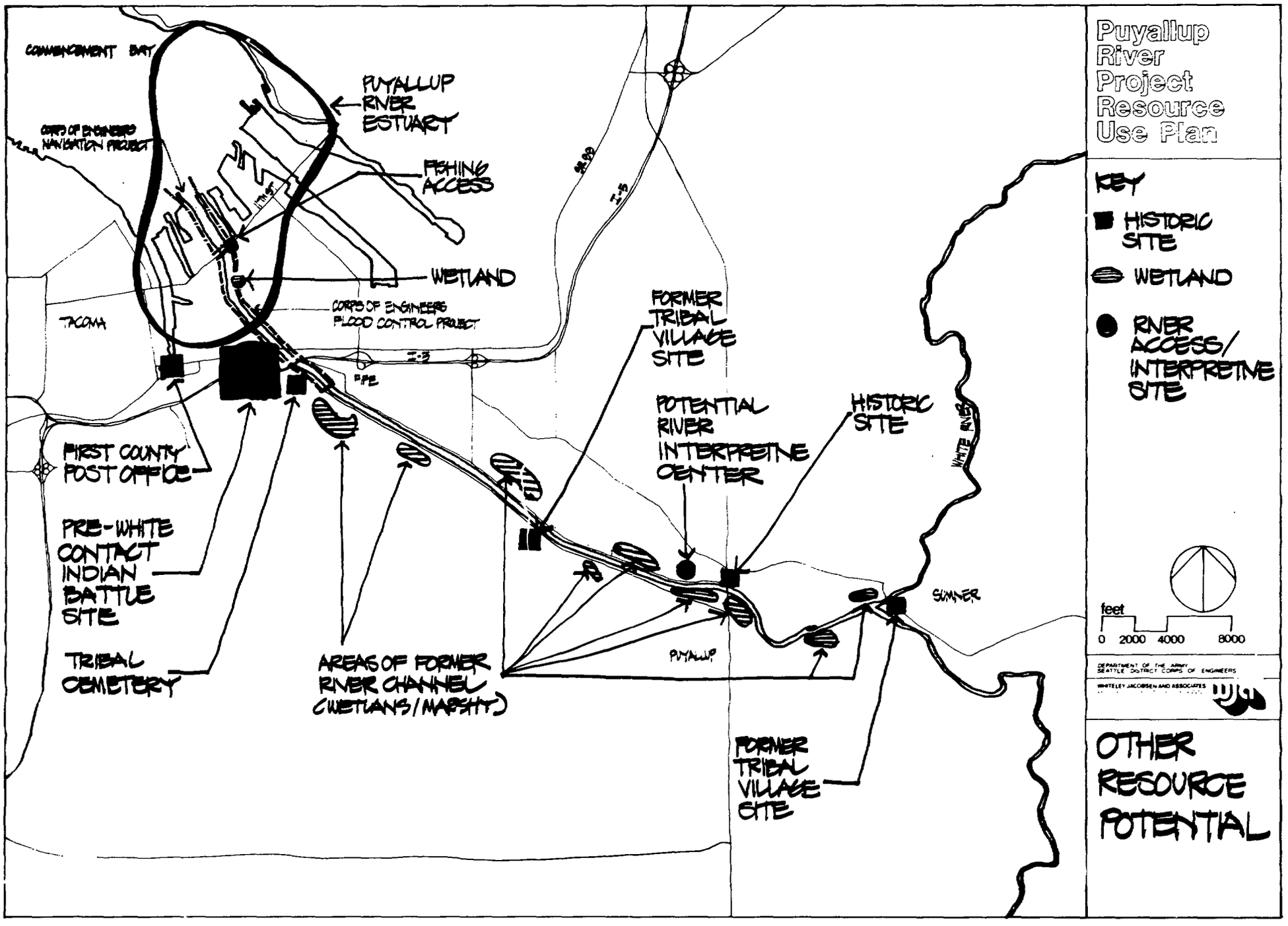
It is unfeasible to develop a trail from the mouth to East 11th Street on the south bank because of the St. Regis Paper Company Mill. From East 11th Street to Fife there is the potential for developing a multi-purpose trail. From Fife to Puyallup this trail could continue on the bank between SR-410 and the river. Continuation along the south bank from Puyallup to Sumner again would require private acquisition for the trail right-of-way.

While it is possible for the trail to utilize the East 11th Street Bridge to cross the Puyallup River, it would be preferable to acquire the nearby railroad bridge which would allow users to cross the river with little change in elevation. It is likely that this bridge will be abandoned by the Milwaukee Railroad in the near future. A second crossing is possible on a new bridge which could be developed as a suspended structure under either the Interstate 5 highway bridge or the U.S. 99 highway bridge. A third trail crossing is possible utilizing the existing Clarks Creek bridge. A fourth trail crossing is possible at Puyallup using the Meridian Avenue highway bridge. Finally, a fifth trail crossing is possible using the highway bridge at Sumner.


COMMENCEMENT BAY
NE TACOMA
CORPS OF ENGINEERS NAVIGATION PROJECT
TRAIL SEGMENT NO.1.- Foot Only
EXISTING CITY OF TACOMA BIKE PATH
TRAIL ACROSS RAILROAD BRIDGE
TRAIL SEGMENT NO.2. MULTI USE
CORPS OF ENGINEERS FLOOD CONTROL PROJECT
TACOMA
MCKINLEY HILL
PROPOSED PIERCE COUNTY BICYCLE TRAIL
NEW BRIDGE FOR TRAIL ACROSS RIVER
TRAIL SEGMENT NO. 3 MULTI USE
TRAIL SEGMENT NO.4 - Foot Only
WHITE RIVER
SUMNER
PUYALLUP
TRAIL SEGMENT NO.5. MULTI USE
Puyallup River Project Resource Use Plan
KEY
TRAIL DESTINATION
EXISTING TRAIL
POTENTIAL TRAILS
RIVER CROSSINGS
feet
0 2000 4000 8000
DEPARTMENT OF THE ARMY SEATTLE DISTRICT CORPS OF ENGINEERS
WHITELEY JACOBSEN AND ASSOCIATES
POTENTIAL RECREATION TRAILS

OTHER RESOURCE POTENTIAL

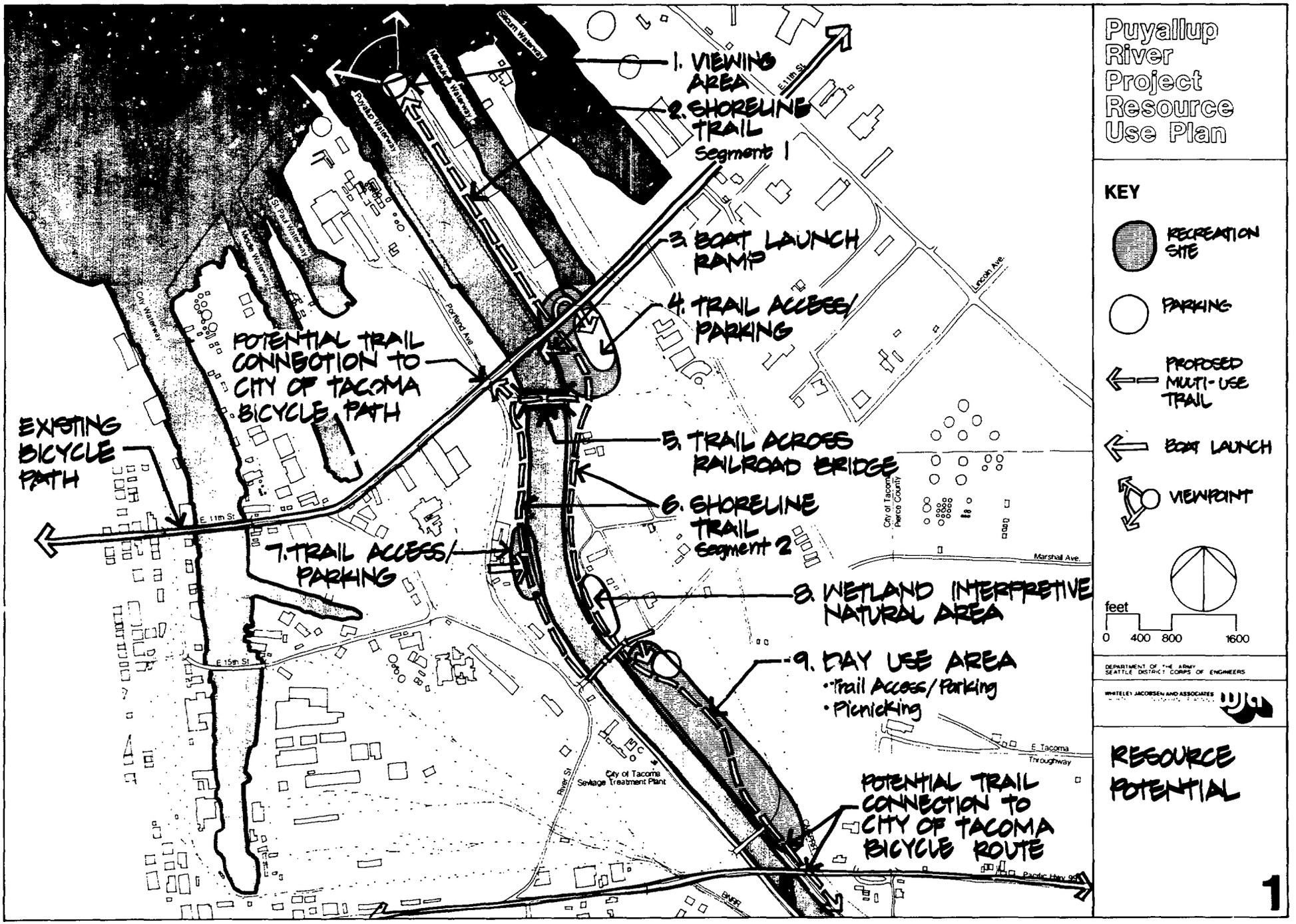
In addition to the primary resource objective of maintaining the flood control integrity of the projects, there is the potential for other resource use for: fisheries enhancement, wildlife preservation and historic interpretation. The map on the facing page shows potential opportunities for other resource development. Identified are potential wetland/natural areas, potential fisheries enhancement areas and historic interpretive features.


COMMENCEMENT BAY
CORPS OF ENGINEERS NAVIGATION PROJECT
PUYALLUP RIVER ESTUARY
FISHING ACCESS
WETLAND
TACOMA
CORPS OF ENGINEERS FLOOD CONTROL PROJECT
I-5
PIPE
FIRST COUNTY POST OFFICE
PRE-WHITE CONTACT INDIAN BATTLE SITE
TRIBAL CEMETERY
AREAS OF FORMER RIVER CHANNEL (WETLANS/MARSHY)
FORMER TRIBAL VILLAGE SITE
POTENTIAL RIVER INTERPRETIVE CENTER
HISTORIC SITE
WHITE RIVER
SUMNER
PUYALLUP
FORMER TRIBAL VILLAGE SITE
Puyallup River Project Resource Use Plan
KEY
HISTORIC SITE
WETLAND
RIVER ACCESS/ INTERPRETIVE SITE
feet
0 2000 4000 8000
DEPARTMENT OF THE ARMY SEATTLE DISTRICT CORPS OF ENGINEERS
WHITELEY JACOBSEN AND ASSOCIATES
OTHER RESOURCE POTENTIAL

SITE SUITABILITY MATRIX

MAP 1

SITE	AREA	PRESENT USE	ACCESSIBILITY	OWNERSHIP	ENVIRONMENTAL SUITABILITY				COMMENTS
					SCENIC VALUE	NATURAL VALUE	RECREATIONAL VALUE	DEVELOPMENTAL VALUE	
1. Viewpoint	.05 acres	Vacant area adjacent to railroad switchyard.	low	Milwaukee Railroad	mod/high	mod	high	mod/low	Siltation at mouth of river limits development suitability for shipping.
2. Trail Link Segment #1	.6 mi.	Railroad Switch Yard	low	Milwaukee Railroad	mod	low	mod/low	mod/high	Potential use for container storage/bulk conveyor.
3. Boat Launch Ramp	.01 acre	Informal boat launch	mod.	Corps	low	mod	mod/high	low/mod	Existing boat launch/parking used by fishermen.
4. Trail Access/Parking	16 acres	Vacant	mod.	Corps/Private	mod.	mod.	high	mod/high	Large, open area, suitable for parking, day use, industrial.
5. Trail Access/ Railroad Bridge	.12 mi.	Railroad	high	Milwaukee Railroad	mod/high	low	mod/high	low/mod.	Bridge will no longer be needed when Fife switchyard is completed.
6. Shoreline Trail Segment #2	2.3 mile segments, each side	Levee Maintainence road	mod.	Corps	mod/high	mod/high	high	low	Road used for Corps heavy maintainence vehicles, fishermen, sightseers
7. Trail Access/ Parking	6 acres	Stockpiling	mod.	Corps	mod.	mod/high	mod/high	mod/high	Industry encroaches on Corps property
8. Wetland, Interpretive Natural Area	5 acres	Vacant	mod.	Corps	mod/high	high	mod.	low	High natural value due to marsh habitat. Threat of filling the marsh by industry
9. Day Use Area	34 acres	Scrap wood stockpiling	mod.	Corps	high	mod./high	high	mod.	Present use is unsightly. Scrap wood spills onto levee maintainence road.



Puyallup River Project Resource Use Plan

KEY

- RECREATION SITE
- PARKING
- PROPOSED MULTI-USE TRAIL
- BOAT LAUNCH
- VIEWPOINT

feet
0 400 800 1600

DEPARTMENT OF THE ARMY
SEATTLE DISTRICT CORPS OF ENGINEERS

WHITELEY JACOBSEN AND ASSOCIATES

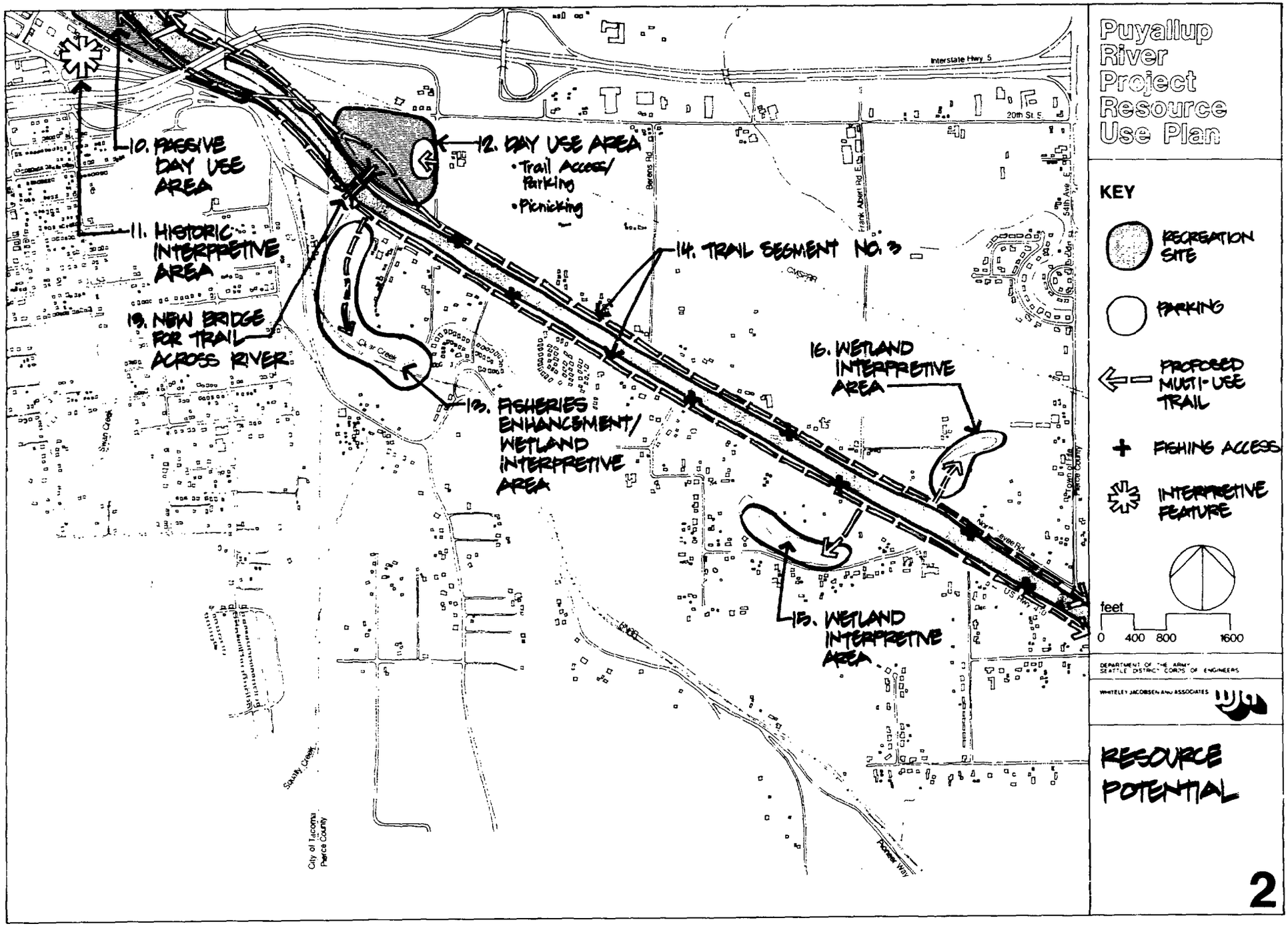
RESOURCE POTENTIAL

1

SITE SUITABILITY MATRIX

MAP 2

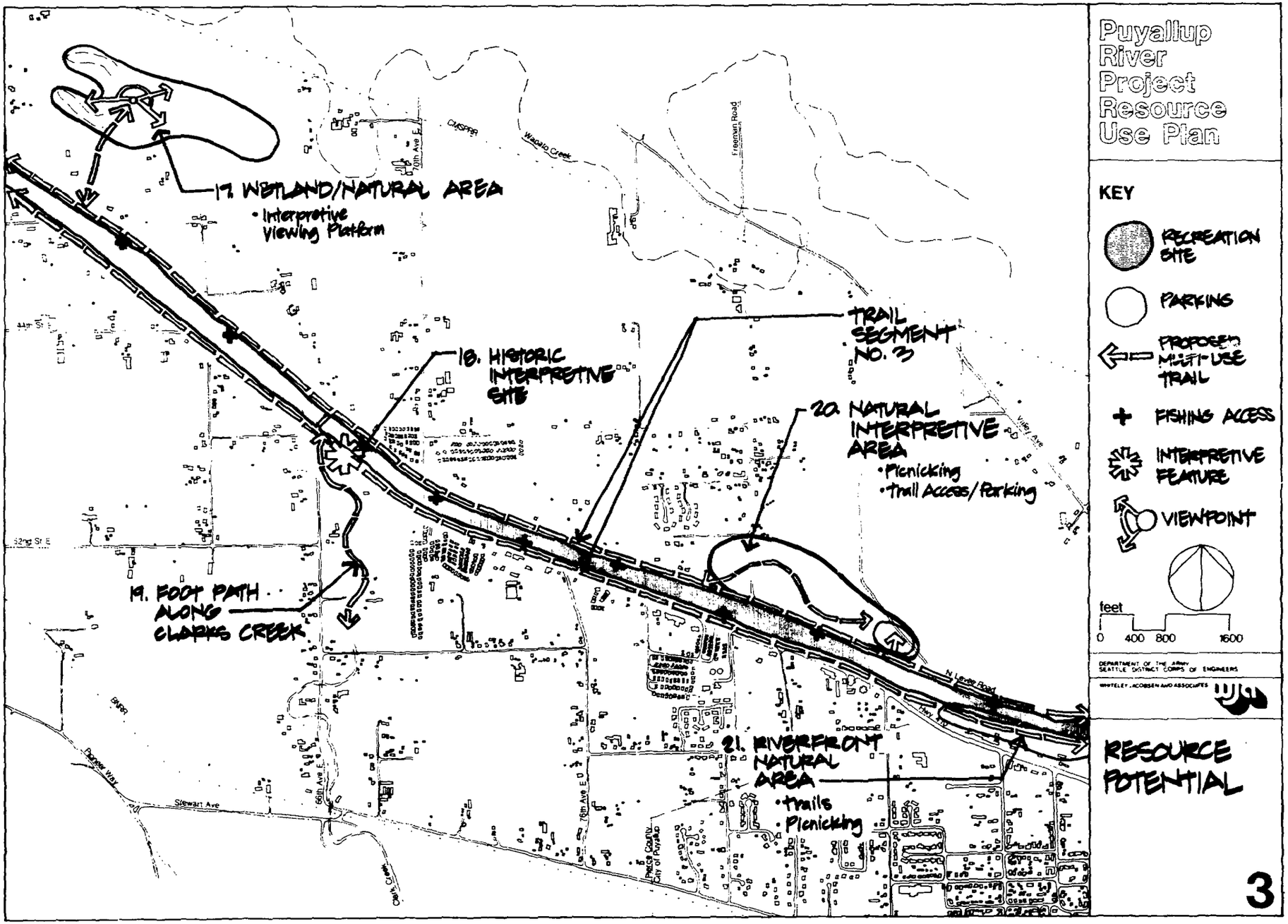
SITE	AREA	PRESENT USE	ACCESSIBILITY	OWNERSHIP	ENVIRONMENTAL SUITABILITY				COMMENTS
					SCENIC VALUE	NATURAL VALUE	RECREATIONAL VALUE	DEVELOPMENTAL VALUE	
10. Day Use Area	11 acres	Area presently used by Puyallup Indians, recreation, fishing	mod.	Corps, Puyallup Tribe	mod/high	mod.	high	mod.	Tribal ceremonial area.
11. Historic Interpretive Area		Industrial / Transportation	high	Private / Public	low	low	mod	high	
12. Day Use Area	23.5 acres	Grazing	high	Private	high	mod/high	high	high	Last large agricultural area close to Tacoma.
13. Fisheries Enhancement Wetland Interpretive Area	23 acres	Agricultural / residential	high	Burlington Northern RR & Private	high	high	high	mod/high	Former river channel area
14. Trail segment #3	5.4 miles, each side	North Levee Road, U.S. Highway 410	high	Inter County River Improvement District	high	mod.	mod.	low	Limited Area on top of levee for trail.
15. Wetland / Interpretive Area	10.5 acres	Vacant, agriculture	high	Private	high	high	mod	low	Wet, ponding area, ox bow from former river. Heavy recreational use not advisable, area should be conserved.
16. Wetland Interpretive Area	7.5 acres	Agriculture	high	Private	high	high	mod	low	Wet area, not suitable for heavy use, but for sensitive use as a conserve and interpretive area.


10. PASSIVE DAY USE AREA
11. HISTORIC INTERPRETIVE AREA
12. DAY USE AREA
• Trail Access/ Parking
• Picnicking
13. FISHERIES ENHANCEMENT/ WETLAND INTERPRETIVE AREA
14. TRAIL SEGMENT NO. 3
15. WETLAND INTERPRETIVE AREA
16. WETLAND INTERPRETIVE AREA
19. NEW BRIDGE FOR TRAIL ACROSS RIVER
Puyallup River Project Resource Use Plan
KEY
RECREATION SITE
PARKING
PROPOSED MULTI-USE TRAIL
FISHING ACCESS
INTERPRETIVE FEATURE
feet
0 400 800 1600
DEPARTMENT OF THE ARMY SEATTLE DISTRICT CORPS OF ENGINEERS
WHITELEY JACOBSEN AND ASSOCIATES
RESOURCE POTENTIAL
2
Interstate Hwy. 5
20th St. E.
Berens Rd.
Frank Albert Rd. E.
54th Ave. E.
Meyer River Rd.
US Hwy 410
Pioneer Way
Swan Creek
Clear Creek
South Creek
City of Tacoma
Pierce County
Town of Fife
Pierce County

SITE SUITABILITY MATRIX

MAP 3

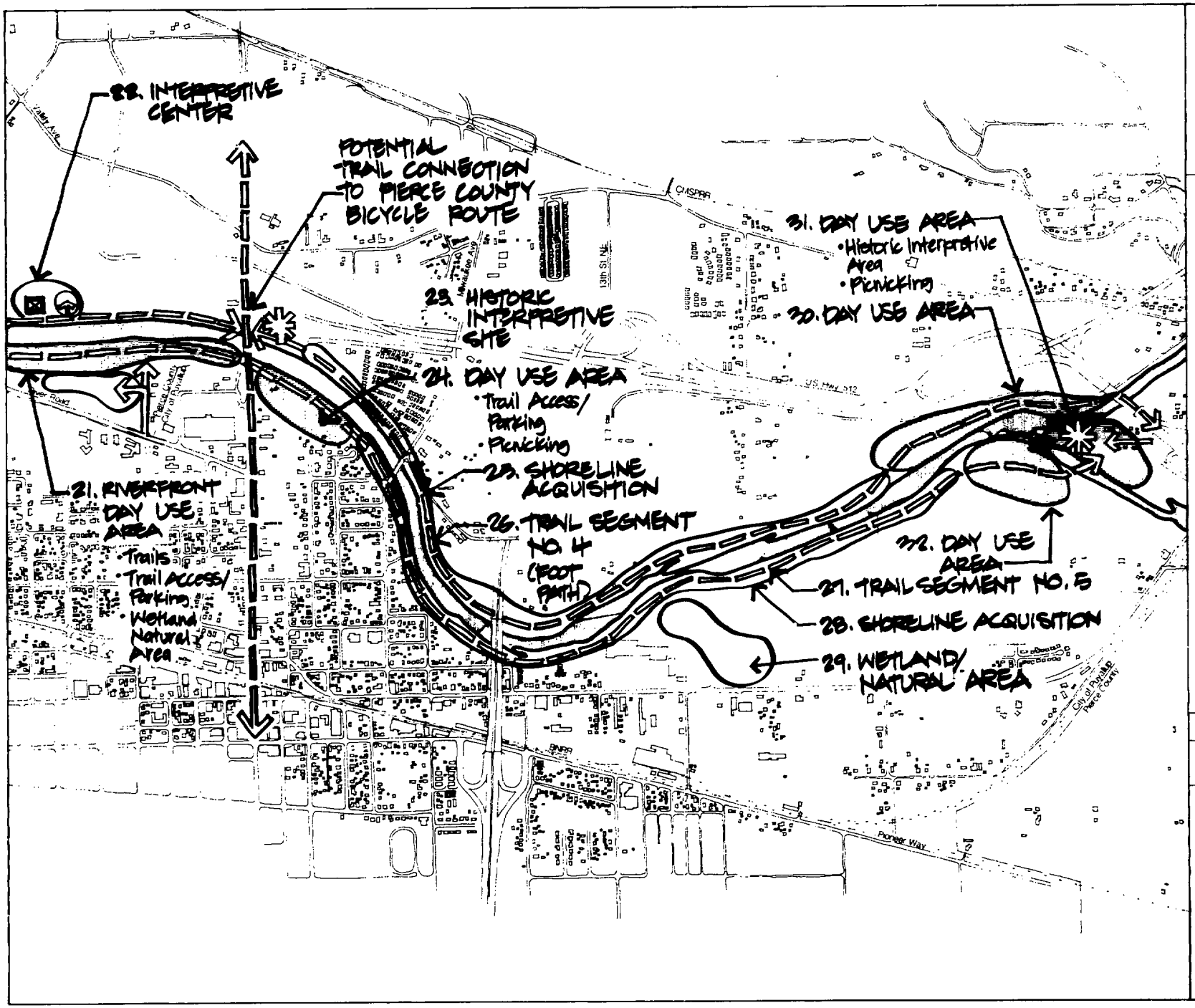
SITE	AREA	PRESENT USE	ACCESSIBILITY	OWNERSHIP	ENVIRONMENTAL SUITABILITY				COMMENTS
					SCENIC VALUE	NATURAL VALUE	RECREATIONAL VALUE	DEVELOPMENTAL VALUE	
17. Wetland/ Natural Area	43 acres	Vacant	mod.	Private	high	high	mod.	low	Low intensity use advised to protect habitat
18. Historic Interpretive Area		Commercial, residential	high	Private	low/mod.	low	mod.	mod.	
19. Clark's Creek	5 miles	Agriculture, residential	low	Private	high	high	high	low	Acquisition/easement required for trail along Clark's Creek
20. Wooded Area	42 acres	Vacant-wooded	high	Inter County River Improvement District	high	high	high	low	Low area subject to flooding.
21. Riverfront Natural Area	20 acres	Vacant	Low/mod.	Private/Inter County River Improvement District	mod.	mod.	high	low	Commercial establishments dump refuse near river.


17. WETLAND/NATURAL AREA
• Interpretive Viewing Platform
18. HISTORIC INTERPRETIVE SITE
TRAIL SEGMENT NO. 3
20. NATURAL INTERPRETIVE AREA
• Picnicking
• Trail Access/Parking
19. FOOT PATH ALONG CLARKS CREEK
21. RIVERFRONT NATURAL AREA
• trails
• Picnicking
Puyallup River Project Resource Use Plan
KEY
RECREATION SITE
PARKING
PROPOSED MULTI-USE TRAIL
FISHING ACCESS
INTERPRETIVE FEATURE
VIEWPOINT
feet
0 400 800 1600
DEPARTMENT OF THE ARMY SEATTLE DISTRICT CORPS OF ENGINEERS
WHITELEY, JACOBSEN AND ASSOCIATES
RESOURCE POTENTIAL
3

SITE SUITABILITY MATRIX

MAP 4

SITE	AREA	PRESENT USE	ACCESSIBILITY	OWNERSHIP	ENVIRONMENTAL SUITABILITY				COMMENTS
					SCENIC VALUE	NATURAL VALUE	RECREATIONAL VALUE	DEVELOPMENTAL VALUE	
22. Interpretive Center	6.5 acres	Administrative Offices for Inter County River Improvement District	high	Inter County River Improvement District	mod/high	low/mod.	low	mod.	
23. Historic Interpretive Site	1 acre	Agriculture	high	Private	high	mod.	mod.	mod.	
24. Day Use Area	10.5 acres	Parking for roller rink; undeveloped/ residential	mod/high	Private/Inter County River Improvement District	mod./high	mod/high	high	high	Area subject to river flooding.
25. Shoreline Acquisition	40 acres	Mobile home park, agriculture, residential, undeveloped	low	Private	mod/high	mod/high	high	low	Extensive vegetation. Adjacent uses encroach on river bank. Therefore, foot access is most feasible. Areas along river are quite narrow. Vegetation buffers other land uses, attracts wildlife.
26. Trail Segment #4	2.4 miles	Mobile home park, agriculture	low	Private	mod/high	mod/high	high	low	
27. Trail Segment #5	2.4 miles	commercial, light industry, residential	low	Private	mod/high	Varies	high	mod/high	Businesses are built adjacent to river edge affecting scenic character.
28. Shoreline Acquisition	45 acres	commercial, residential	mod/high	Private	Varies	Varies	high	mod/high	
29. Wetland/ Natural Area	15 acres	Vacant	high	Priv...e	mod.	mod.	high	high	Area subject to flooding
30. Day Use Area	18 acres	Agriculture/ Vacant	mod.	Private	Varies	mod/high	high	mod.	CR 512 is adjacent to site, large pond has high natural value.
31. Day Use Area	12 acres	Vacant/ Sewage Treatment Plant	mod.	Private	high	high	mod.	low	Strong odor from treatment plant
32. Day Use Area	14 acres	Vacant	mod.	Private	high	mod.	high	high	



Puyallup River Project Resource Use Plan

KEY

- RECREATION SITE
- PARKING
- PROPOSED MULTI-USE TRAIL
- INTERPRETIVE FEATURE

feet
0 400 800 1600

DEPARTMENT OF THE ARMY
SEATTLE DISTRICT CORPS OF ENGINEERS

WHITELY MCOBSEN AND ASSOCIATES

RESOURCE POTENTIAL

4

The following objectives were developed in response to the problems and opportunities identified in Chapter Three. These objectives should be considered as preliminary and are presented to facilitate discussion by the agencies responsible for resource management of the Puyallup River and the public.

4. RESOURCE USE OBJECTIVES

GENERAL RESOURCE USE OBJECTIVE

Manage the natural resources of the Puyallup River and adjacent shorelines to: provide public access for low-intensity day use recreation, fishing, and cultural interpretation; preserve wetlands; maintain the operational requirements of the flood control projects.

Discussion

The Puyallup River study area is made up of four distinct sub areas. Starting at Commencement Bay, Section A - "The Mouth" runs between the Bay and N.E. Eleventh Street through heavy industries and transportation facilities. Section B - "Port of Tacoma Industrial Area" runs from N.E. Eleventh to Interstate Five through somewhat less intensive industrial uses. Section C - "Inter County River Improvement District" runs from Fife to Puyallup through agricultural and residential uses. Section D - "Puyallup Urban Area: runs from the City of Puyallup to the City of Sumner. Sections A and B include the area of the Corps of Engineers Puyallup River Flood Control Project. Sections C and D include the Inter County River Improvement District Flood Control Project.

AREA A — THE MOUTH

The area at the Mouth is surrounded by nearby industrial development. Public access is constrained on the south bank by the St. Regis mill operation. There are opportunities for public access and viewing along the north bank.

ZONING: Project Operations/Recreation - Low Density Use

1. Resource Use Objective:

   - Provide public access for scenic viewing and fishing at the mouth.

2. Development and Management:

   - Work with Port of Tacoma to provide a trail right-of-way adjacent to the river shoreline.
   - Public development should be limited to a shoreline trail, interpretive signing and a viewing/fishing platform.
   - No recreational vehicles permitted in this area.

3. Major Constraints

- Potential bulk conveyor development by Port of Tacoma adjacent to levee would conflict with recreational use.
- Access for levee maintenance vehicles.

AREA B — PORT OF TACOMA INDUSTRIAL AREA

The land uses in this area are light industrial, transportation (trucking companies), municipal waste treatment, and storage of bulk materials. A substantial portion of the area along the river is undeveloped. The area also contains a significant wetland that is being encroached upon by an adjacent industrial facility.

ZONING: Project Operations/Recreation - Low Density Use

1. Resource Use Objective

- Preserve and protect the wetland habitat adjacent to the river.
- Protect the natural visual character of the river corridor and minimize encroachment of industrial and commercial land uses.
- Develop a trail system along the river linking Sumner, Puyallup, Fife and Tacoma.
- Provide boating access to the river.

2. Development and Management

- Public development would include: a shoreline trail along the existing levee maintenance road; parking areas for trail users; and a boat ramp.
- Work with the City of Tacoma to insure compatible land use planning for lands adjacent to the project.
- Work with the State of Washington Department of Game to preserve and protect the wetland habitat.
- Work with the Puyallup Indian Tribe to develop boating access.
- Recreational vehicles should be restricted to designated parking areas.
- Acquire lands for development of parking.

3. Major Constraints

- Access for levee maintenance vehicles.

AREA C — INTER COUNTY RIVER IMPROVEMENT DISTRICT

This area is presently in transition from agricultrual to light industrial, commercial and transportation uses. There is extensive use of the siltation benches along both banks for public access, and fishing. Highways have been developed on the top of the levees on both banks limiting the opportunities for extensive recreational facility development. Significant wetland habitats occur in oxbows remaining from the old river channel.

ZONING: Project Operations/Recreation - Low Density Use

1. Resource Use Objectives:

   - Develop a trail system along the river linking Sumner, Puyallup, Fife and Tacoma.
   - Maintain opportuanities for public access for fishing and passive recreation.
   - Identify cultural resources for interpretive displays and exhibits.
   - Preserve and protect wetland habitats.

2. Development and Management

   - Work with Pierce County and the Inter County River Improvement District to develop the shoreline trail.
   - Conduct a cultural/archeological investigation.
   - Work with Pierce County and the State of Washington Department of Game to preserve and protect wetland habitats.
   - Develop parking/access areas adjacent to the shoreline trail.
   - Work with the Puyallup Indian Tribe and Inter County River Improvement District to develop interpretive features.

3. Major Constraints

   None

AREA D — PUYALLUP URBAN AREA

This area contains the greatest concentration of commercial and residential land uses adjacent to the river in the study area. There are generally no access roads on the levees in this area. The lack of access roads coupled with the limited amount of publicly owned lands is a constraint to development of shoreline recreational facilities.

ZONING: Project Operations/Recreation - Low Density Use

1. Resource Use Objective

   - Develop a trail system along the river linking Sumner, Puyallup, Fife and Tacoma.
   - Develop parking and related day use recreational facilities.

2. Development and Management

   - Work with the Cities of Puyallup and Sumner to acquire easements and construct a shoreline trail along the north bank of the river.
   - Permit no vehicle access to the trail.

3. Major Constraints

   - Property acquisition or easements will be required for trail development.

Based on the analysis of existing conditions, problems and opportunities and resource objectives, four alternative resource use concepts were developed:

1. "Do Nothing".

2. Trail and recreational facilities on the Corps project land.

3. Development of the trail and recreational facilities on the north bank from the mouth to Sumner.

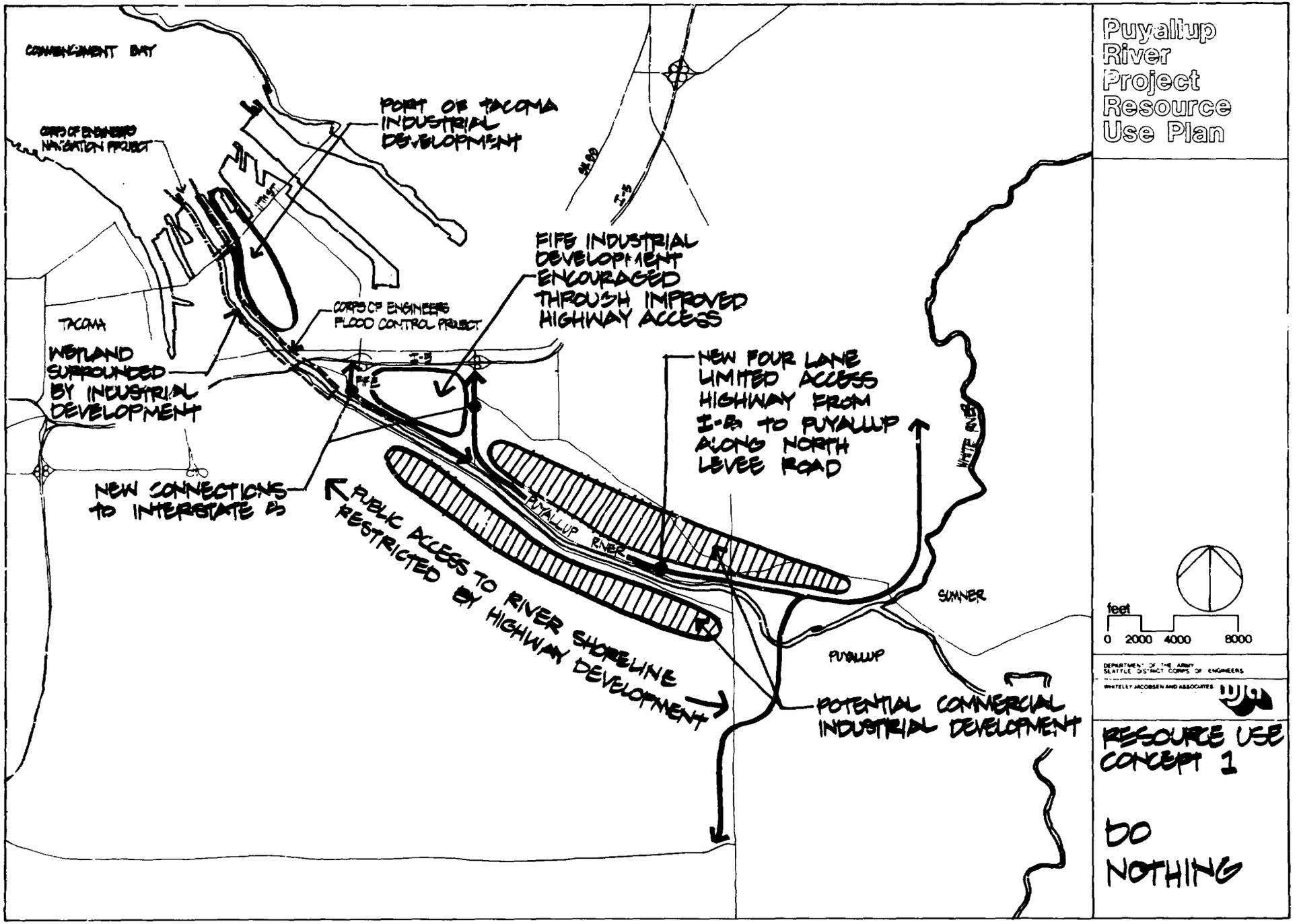
4. Development of a trail and recreational facilities on both banks of the Puyallup River.

5. RESOURCE USE CONCEPTS

CONCEPT 1 DO NOTHING

Concept 1 assumes that the Corps of Engineers Flood Control Project and Inter County River Improvement District Project will remain essentially as they are today. No additional public actions will be taken to utilize either projects' resources for recreational activities or other potential uses. It is assumed that even though no actions will be taken to utilize the resources of the two projects, other public and private developments will continue to take place. For example, highway facilities proposed by the State Department of Transportation are likely to be developed between Interstate 5 and the City of Puyallup, along either the north or south banks of the Puyallup River. Should such a development take place, public shoreline access would certainly be more restricted than at present.

The "Do Nothing" alternative also assumes that projects such as the proposed highway connection, City of Fife industrial development, Port of Tacoma industrial development, Milwaukee Railroad Switch Yard, etc. will take place. Each of these projects will probably have a spin-off effect, that is, they will tend to encourage additional adjacent private development. The development of commercial and manufacturing activities that have already taken place along Interstate 5 on the valley floor is a good example of what is likely to happen as more transportation facilities are developed along the river.

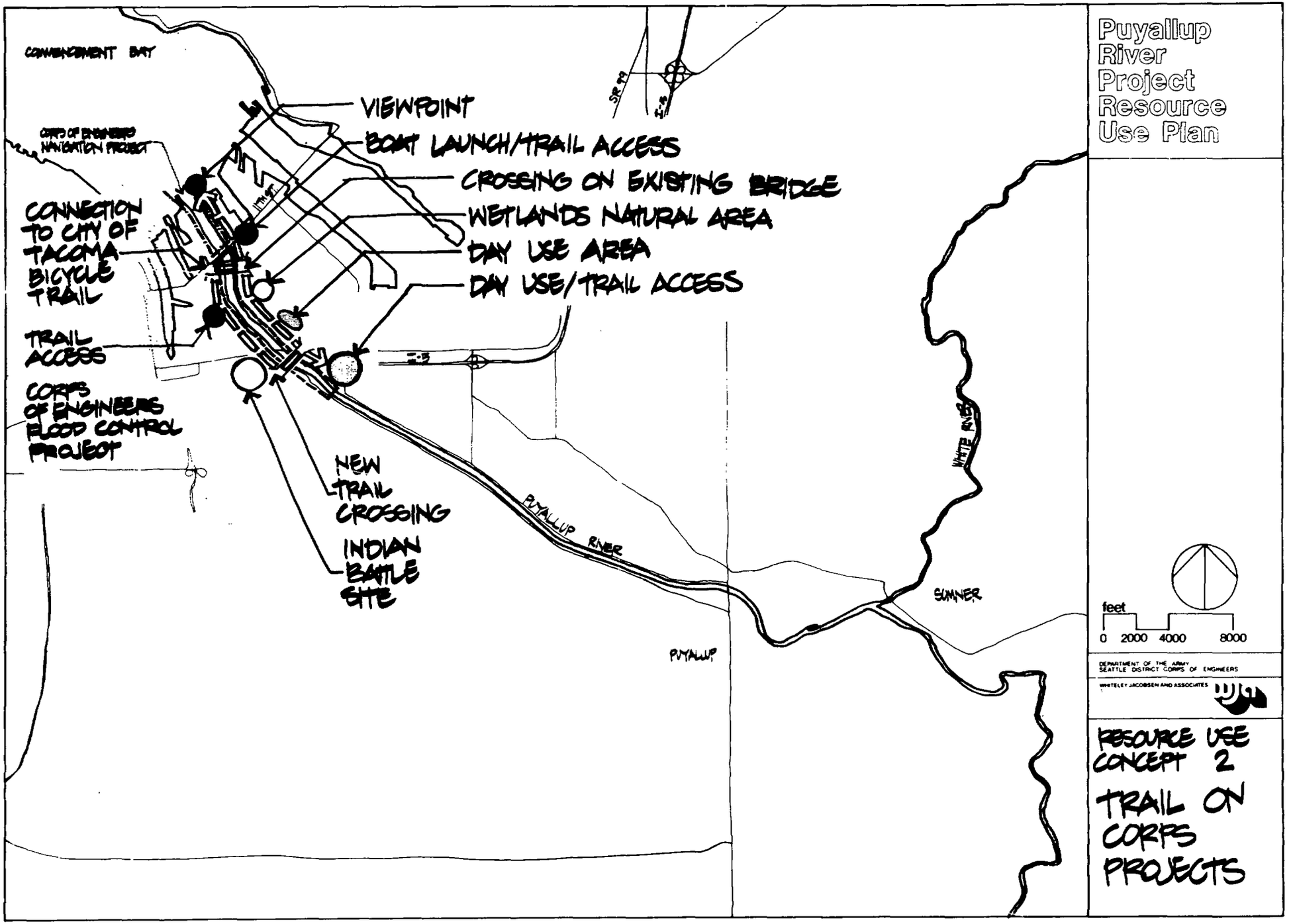

COMMENCEMENT BAY
CORPS OF ENGINEERS NAVIGATION PROJECT
PORT OF TACOMA INDUSTRIAL DEVELOPMENT
11TH ST
FIFE INDUSTRIAL DEVELOPMENT ENCOURAGED THROUGH IMPROVED HIGHWAY ACCESS
CORPS OF ENGINEERS FLOOD CONTROL PROJECT
TACOMA
WETLAND SURROUNDED BY INDUSTRIAL DEVELOPMENT
FIFE
NEW FOUR LANE LIMITED ACCESS HIGHWAY FROM I-5 TO PUYALLUP ALONG NORTH LEVEE ROAD
NEW CONNECTIONS TO INTERSTATE 5
PUBLIC ACCESS TO RIVER SHORELINE RESTRICTED BY HIGHWAY DEVELOPMENT
PUYALLUP RIVER
WHITE RIVER
SUMNER
PUYALLUP
POTENTIAL COMMERCIAL INDUSTRIAL DEVELOPMENT
Puyallup River Project Resource Use Plan
feet
0 2000 4000 8000
DEPARTMENT OF THE ARMY SEATTLE DISTRICT CORPS OF ENGINEERS
WHITELY JACOBSEN AND ASSOCIATES
RESOURCE USE CONCEPT 1
DO NOTHING

CONCEPT 2 TRAIL AND RECREATIONAL FACILITIES ON CORPS OF ENGINEERS FLOOD CONTROL PROJECT

This concept would develop a two mile loop trail on the existing maintenance road on the Corps of Engineers levee. Along the loop trail a series of small day use facilities and trail access points with parking could be developed. Property acquisition would be limited to a small area adjacent to the East 11th Street Bridge and an area near Fife for day use/parking areas.

The concept proposes an outlook at the mouth of the river for viewing Commencement Bay, Point Defiance, the city center and Northeast Tacoma as well as the various port activities. This viewpoint would be connected to a day use/parking area at the East 11th Street Bridge by a linear path adjacent to the Puyallup Waterway. The area under and adjacent to the East 11th Street Bridge would be developed as a major access point for people using trail and recreational facilities. Parking would be developed along with restrooms and a boat launch ramp. Moving south, along the north bank of the river, an existing wet land area would be preserved and enhanced for natural interpretation. Farther to the south a small day use area for picnicking and other passive activities would be developed on Corps property. At the southern most point along the north bank near Fife would be another major day use trail access point with parking facilities, restrooms and picnicking sites.

There would be three means of access across the river to the trail on the south bank. An existing railroad bridge near East 11th Street could be acquired when the Milwaukee Railroad develops its switching facility at Fife. This bridge could provide "at grade" crossing for the trail. A second access point across the river would utilize the existing Lincoln Avenue Bridge. A third access point could be developed by suspending a new bridge for pedestrians and cyclists below the existing Interstate Five concrete bridge structure. In addition to the trail to be developed along the south bank there could be a trail access point/parking facility developed just south of the railroad bridge.


COMMENCEMENT BAY
CORPS OF ENGINEERS NAVIGATION PROJECT
VIEWPOINT
BOAT LAUNCH/TRAIL ACCESS
CROSSING ON EXISTING BRIDGE
WETLANDS NATURAL AREA
DAY USE AREA
DAY USE/TRAIL ACCESS
CONNECTION TO CITY OF TACOMA BICYCLE TRAIL
TRAIL ACCESS
CORPS OF ENGINEERS FLOOD CONTROL PROJECT
NEW TRAIL CROSSING
INDIAN BATTLE SITE
PUYALLUP RIVER
WHITE RIVER
SUMNER
PUYALLUP
Puyallup River Project Resource Use Plan
feet
0 2000 4000 8000
DEPARTMENT OF THE ARMY SEATTLE DISTRICT CORPS OF ENGINEERS
WHITELEY JACOBSEN AND ASSOCIATES
RESOURCE USE CONCEPT 2
TRAIL ON CORPS PROJECTS

TRAIL CONCEPTS FOR CORPS PROPERTY

There are three alternative concepts for development of a trail on the Corps of Engineers Flood Control Project: Concept A presents the least problems for development of the trail and handling problems with public access and parking. Under Concept A, parking facilities would be developed at various points along the trail. With the exception of maintenance vehicles, no vehicles would be permitted on the trail. Because Concept B & C permit vehicles to travel anywhere along the trail it can be expected that there will be problems with parking in unauthorized locations, such as driving over landscape material and even parking on the path.

Concepts B and C include filling on the upland side of the levee. The effects of such filling on the ponding of interior runoff will be determined during the next phase of study.

A. Combined Maintenance Road and Trail

Under this concept the existing gravel road would be paved to provide a smooth path way for bicycling, walking and jogging as well as access for Corps of Engineers maintenance vehicles.

B. Separated Trail/Road

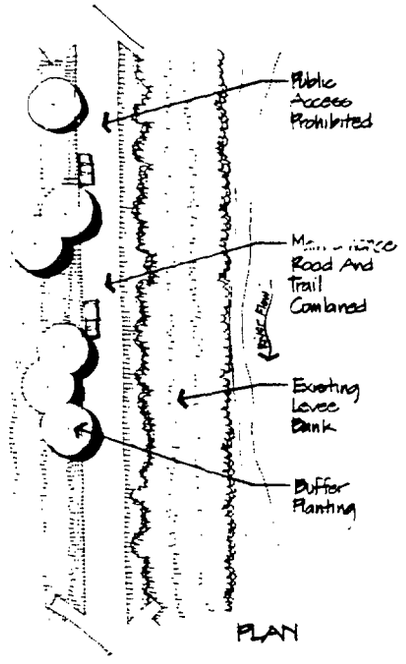
Under this concept a separate bicycle walking/jogging trail would be developed with a median buffer strip between it and a road for public access and maintenance vehicles. Development of this concept would entail widening the current right-of-way to accommodate the additional road.

The location of trees on the edge of the levee may cause the roots to enter the levee and interfere with maintainence operations. Design solutions will be investigated in the second phase of this project concerning vegetative interference with levee operations.

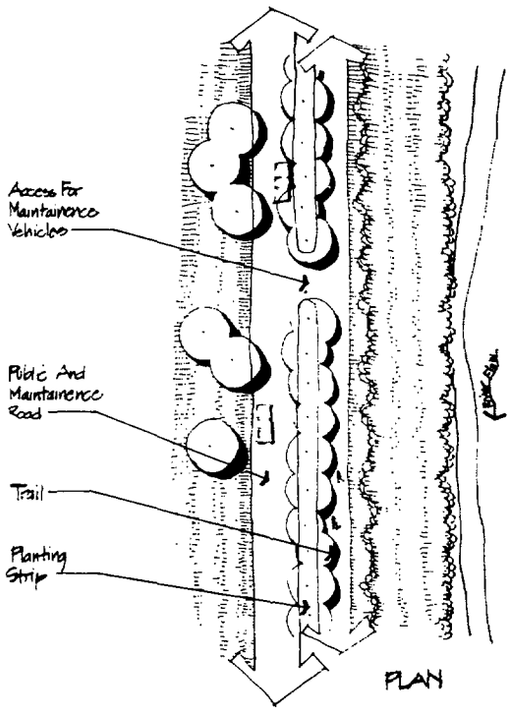
C. Shared Roadway

Under this concept the trail would be separated from the public access/maintenance road by a line of bollards. Again this concept, as in concept B, would require additional right-of-way to accommodate the road and trail.

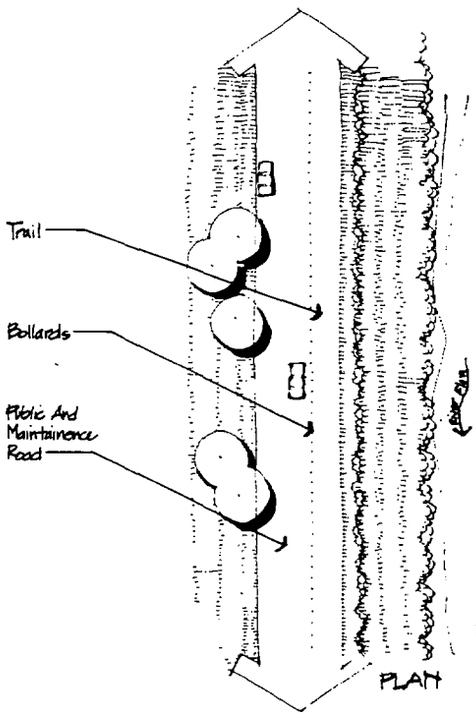
Puyallup River Project Resource Use Plan



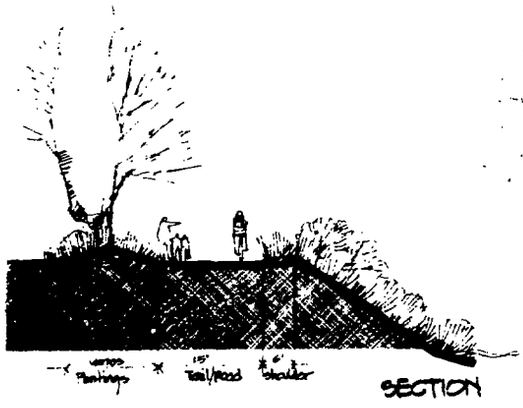
A. COMBINED MAINTAINENCE ROAD AND TRAIL

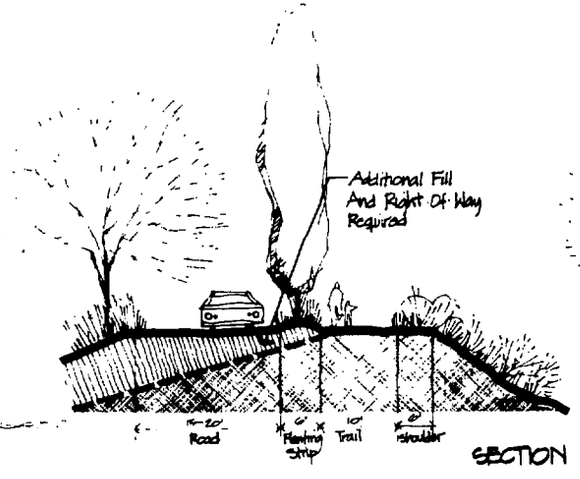


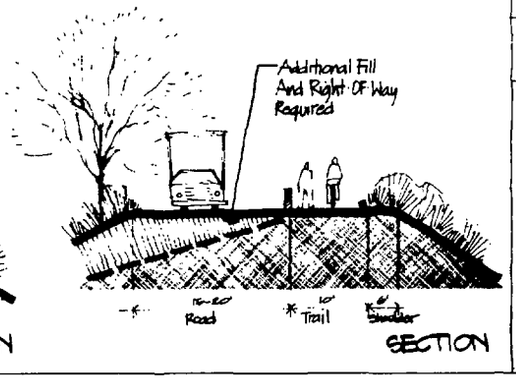
B. SEPARATED TRAIL/ROAD



C. SHARED ROADWAY







DEPARTMENT OF THE ARMY
SEATTLE DISTRICT CORPS OF ENGINEERS

WHITELEY JACOBSEN AND ASSOCIATES

TRAIL CONCEPTS FOR CORPS PROPERTY

TRAIL CROSSING CONCEPTS FOR CORPS PROPERTY

Alternative concepts have been developed to solve the problem of the trail intersection with approaches to railroad and highway bridges. There are four possible alternatives for handling trail crossings and bridge approaches. One or more of these concepts may be appropriate for the various bridge approach situations found on the Corps property.

A. Trail and Levee Bank Under Bridge

This concept is designed for a combined maintenance road and trail. It creates the desirable situation of separating bicycle and foot traffic from a heavily traveled bridge approach. It accomplishes this by depressing the rail on the levee bank under the bridge. Access to the maintenance road would be separated from the trail at this point to the bridge approach. The one disadvantage to placing the trail on the levee bank under the bridge is the occasional flooding of the trail during high water. During this time portions of the trail would be inaccessible. It also creates maintenance problems for the trail.

B. The Tunnel Under Bridge

T is concept would be utilized where there is insufficient vertical clearance on the levee bank to permit the trail to pass under the bridge approach.

A problem associated with this alternative, is that periods of high water may cause flooding of the tunnel and the path. Potential solutions to this problem will be explored and designed in the next phase of this report.

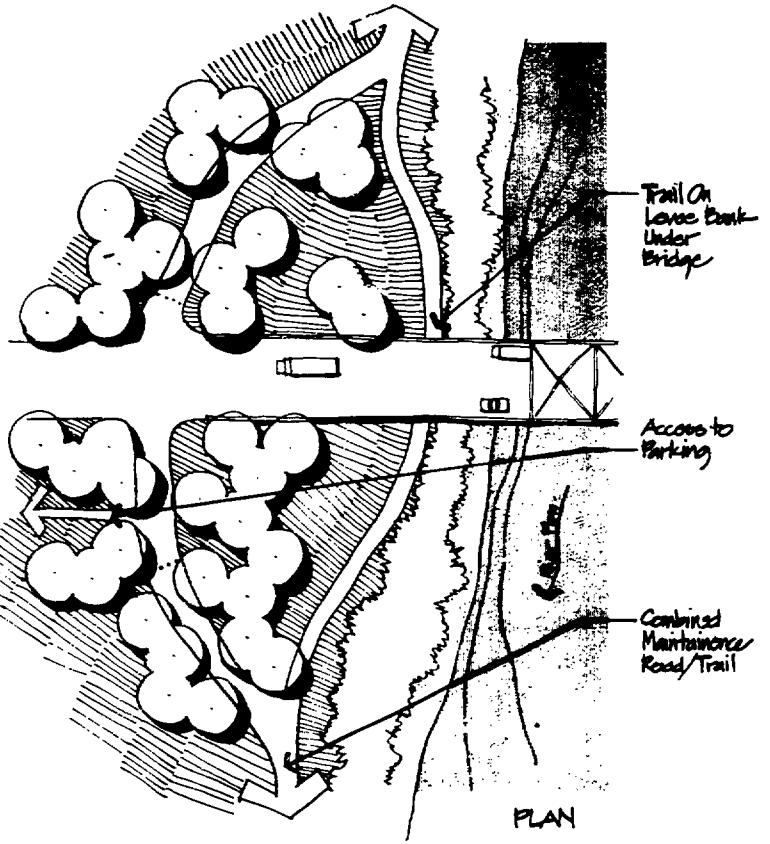
C. Separated Trail

This concept is essentially the same as Concept A, however in this case the trail is separated from the roadway for public access and maintenance vehicles.

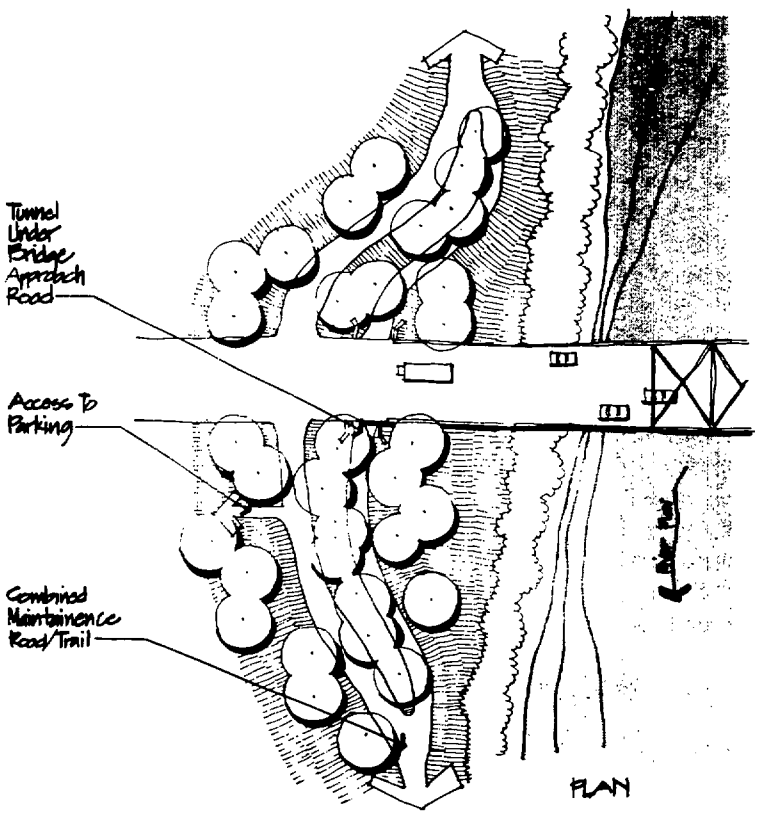
D. Trail Crossing At Grade

For this concept the trail and maintenance/public access road cross the bridge approach at grade. This is the least desirable alternative because of the potential danger to pedestrians and cyclists crossing the roadway. This alternative should only be used for crossing roadways with very low traffic volumes. The concept should not be used for crossing rail lines.

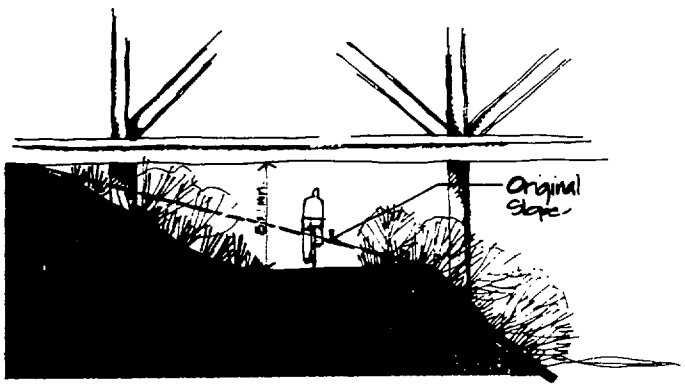
Puyallup River Project Resource Use Plan

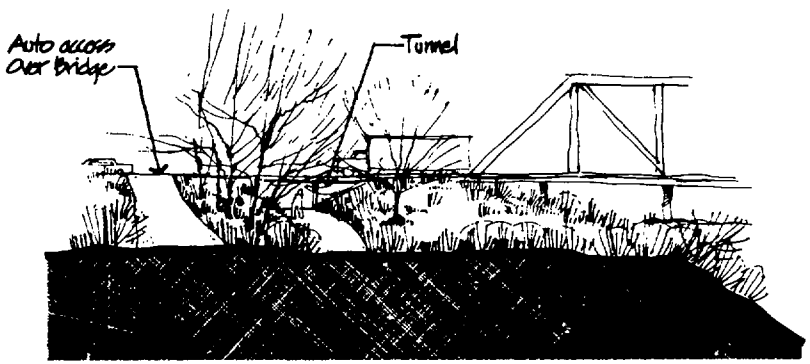


A. TRAIL ON LEVEE BANK UNDER BRIDGE



B. TUNNEL UNDER BRIDGE

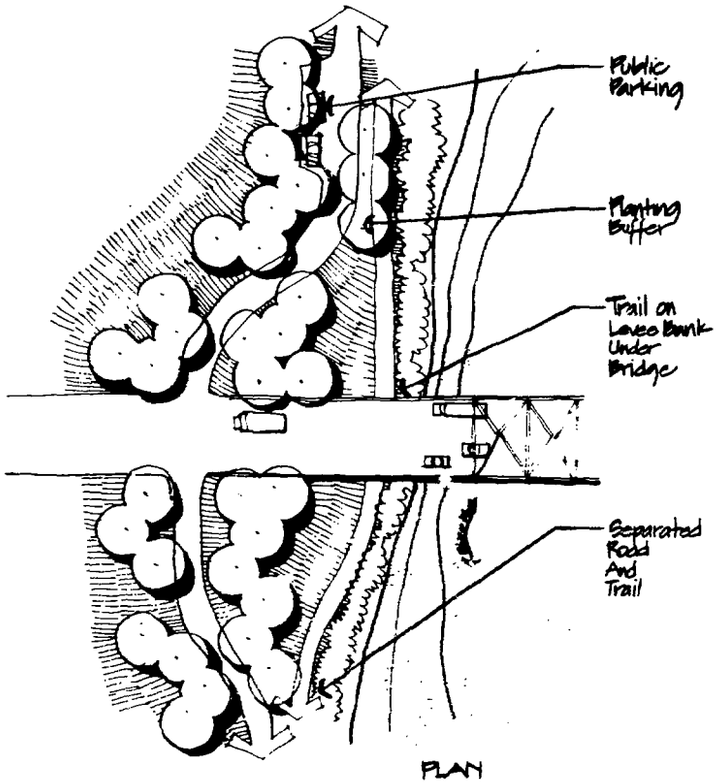




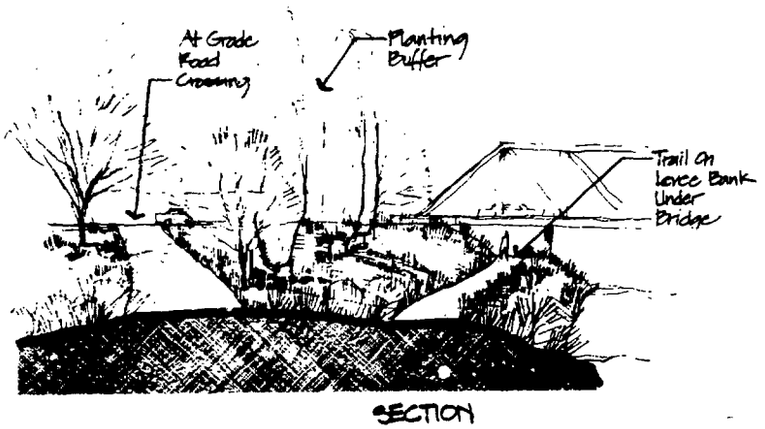
DEPARTMENT OF THE ARMY
SEATTLE DISTRICT CORPS OF ENGINEERS

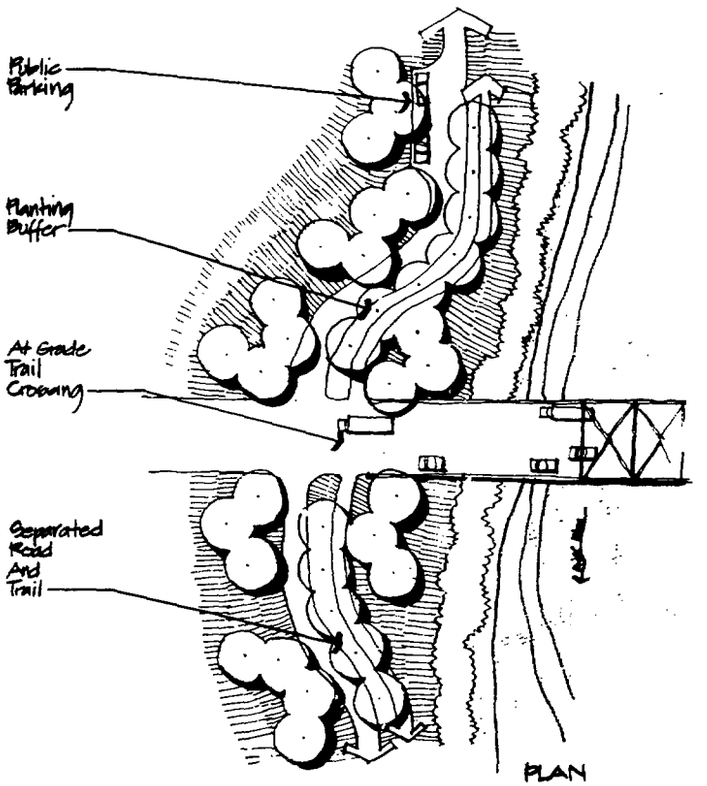
WHITELEY JACOBSEN AND ASSOCIATES
ARCHITECTS ENGINEERS PLANNERS

TRAIL CROSSING CONCEPTS FOR CORPS PROPERTY

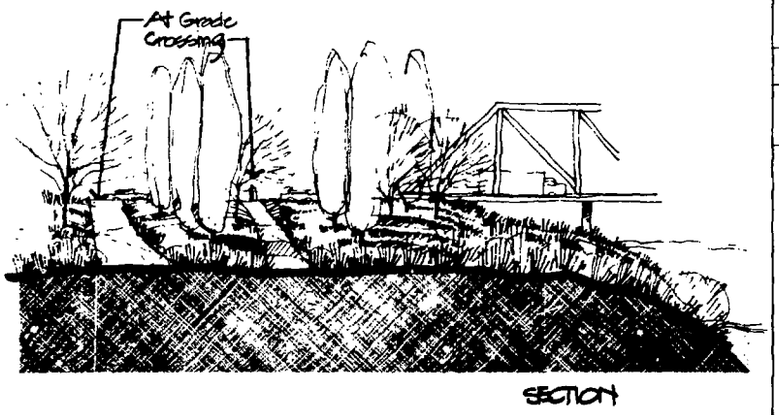


C. SEPARATED TRAIL/ROAD





B. TRAIL CROSSING AT GRADE



Puyallup River Project Resource Use Plan

DEPARTMENT OF THE ARMY
SEATTLE DISTRICT CORPS OF ENGINEERS

WHITELEY JACOBSEN AND ASSOCIATES

TRAIL CROSSING CONCEPTS FOR CORPS PROPERTY

CONCEPT 3 TRAIL AND RECREATIONAL FACILITIES ON THE NORTH BANK

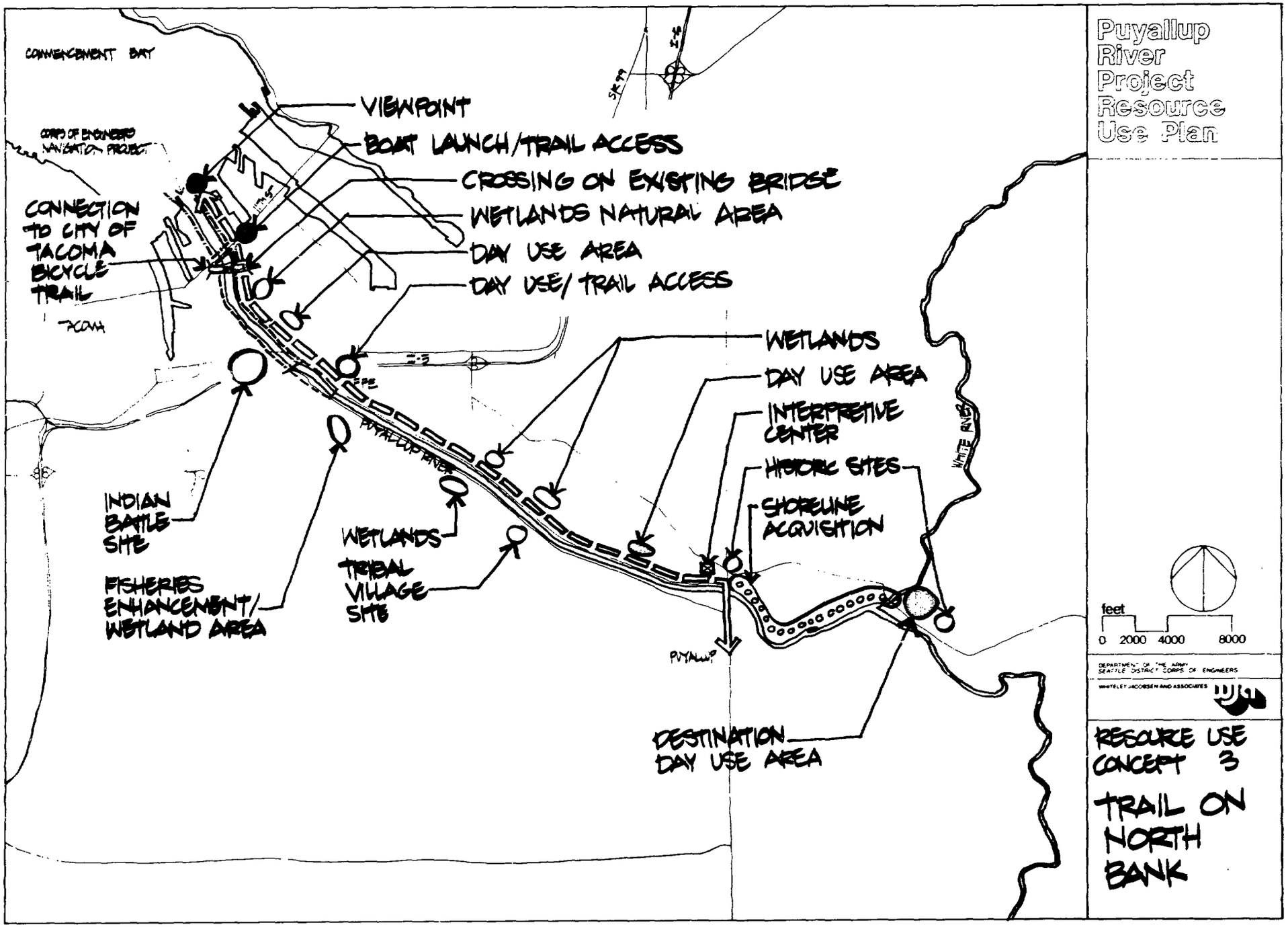
This concept would develop a trail system and a series of recreational facility sites along the north bank of the river from the mouth to the City of Sumner. Fifteen sites and 10 miles of trail would be developed under this concept.

The facilities and trail described in Concept 2 between the mouth and City of Fife would essentially be the same in this alternative. From Fife to the City of Puyallup a trail could either be developed on the siltation bench or on the top of the north levee. Alternative concepts for the location of this trail are shown following Concept 4.

Along the trail there are two major wetland areas which could be preserved and enhanced as wild life habitats and for natural area interpretation. About one mile west of Puyallup is a large wooded area owned by the Inter County River Improvement District which has good potential for development as a major trail access point and day use area.

Closer to the City of Puyallup on the site of the Inter County River Improvement District's office, there is potential for development of an interpretive center. It displays many of the photographs and drawings showing how the flood control projects were accomplished.

At the confluence of the White River and the Puyallup River at the tip of Sumner there is an opportunity to develop a major recreational facility. The County Parks Department has also proposed a recreational facility for this location.


COMMENCEMENT BAY
CORPS OF ENGINEERS NAVIGATION PROJECT
TACOMA
I-5
PUYALLUP RIVER
WHITE RIVER
PUYALLUP
VIEWPOINT
BOAT LAUNCH/TRAIL ACCESS
CROSSING ON EXISTING BRIDGE
WETLANDS NATURAL AREA
DAY USE AREA
DAY USE/ TRAIL ACCESS
CONNECTION TO CITY OF TACOMA BICYCLE TRAIL
WETLANDS
DAY USE AREA
INTERPRETIVE CENTER
HISTORIC SITES
SHORELINE ACQUISITION
INDIAN BATTLE SITE
FISHERIES ENHANCEMENT/ WETLAND AREA
WETLANDS
TRIBAL VILLAGE SITE
DESTINATION DAY USE AREA
Puyallup River Project Resource Use Plan
feet
0 2000 4000 8000
DEPARTMENT OF THE ARMY SEATTLE DISTRICT CORPS OF ENGINEERS
WHITELEY JACOBSEN AND ASSOCIATES
RESOURCE USE CONCEPT 3
TRAIL ON NORTH BANK

TRAIL CONCEPTS FOR NORTH LEVEE ROAD

There are four concepts for a trail on the Inter County River Improvement District Flood Control Project.

A. Trail on Top of Levee

The existing North Levee Road has very narrow or non-existing shoulders, thus requiring an extension of the roadway surface to permit trail development. Concept A creates an additional surface for the trail by developing a new concrete revetment at a slightly steeper angle than the existing levee wall. The trail would be separated from the existing North Levee roadway by a median strip with buffer planting.

B. The Shared Trail/Roadway on Top of Levee

This concept is essentially the same as Concept A. The primary difference is that the median strip is replaced by a line of bollards. The bollards would afford much less buffering and protection than offered by Concept A. The advantage of this concept is that slightly less roadway is necessary.

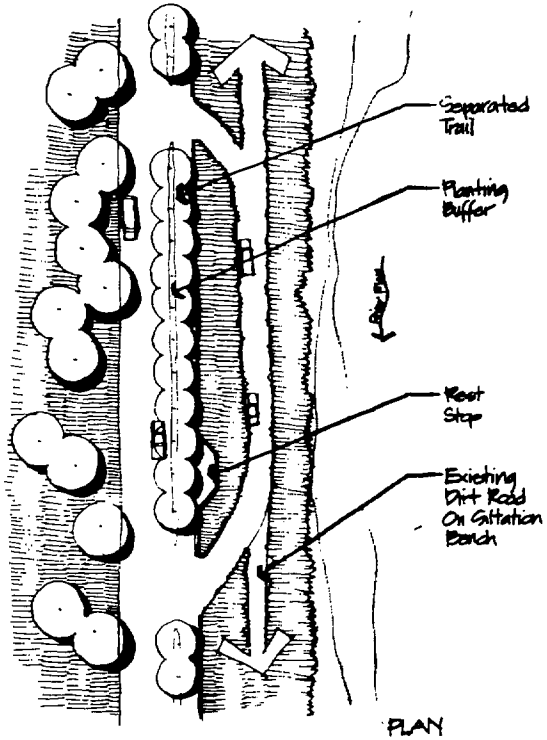
Concepts A and B both include the use of fill along the riverside of levee banks to widen the existing roadway for addition of the trail. The restriction of channel capacity is a potential problem of these alternatives; the next phase of this study will investigate this problem, and propose design solutions.

C. Trail on Bench (found on next page)

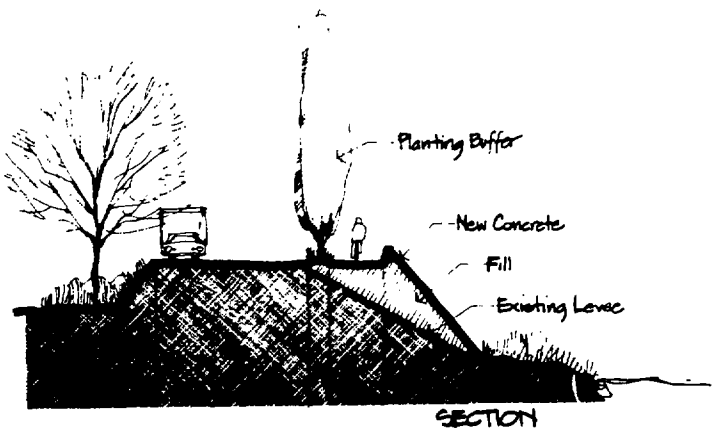
This concept would develop a paved trail on the siltation bench. The trail would be located in approximately the position of the existing dirt road on the bench. Because no vehicles would be permitted on the siltation bench, the concept would probably be opposed by fishermen who presently use the siltation bench for parking their recreational vehicles. It also has the problem of annual flooding and siltation of the trail.

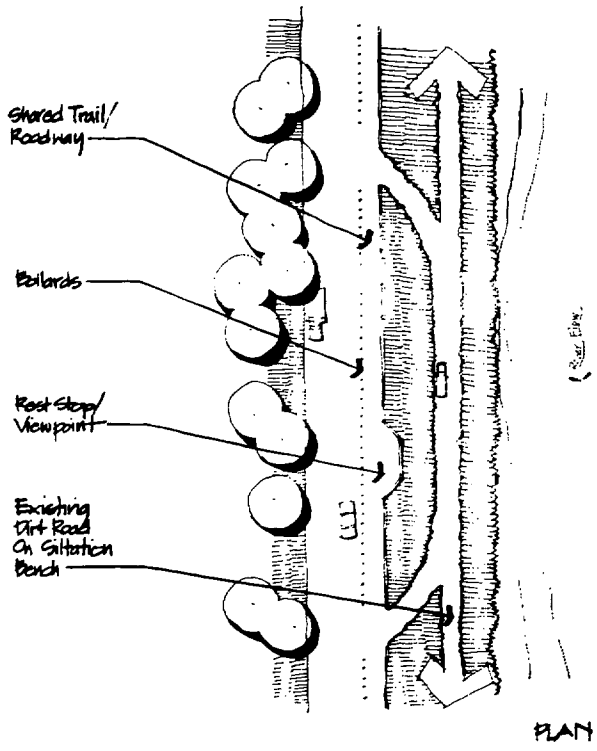
D. Trail With Vehicle Access for Fishing

This concept is essentially the same as Concept C but it provides for occasional parking areas on the siltation bench adjacent to the trail.

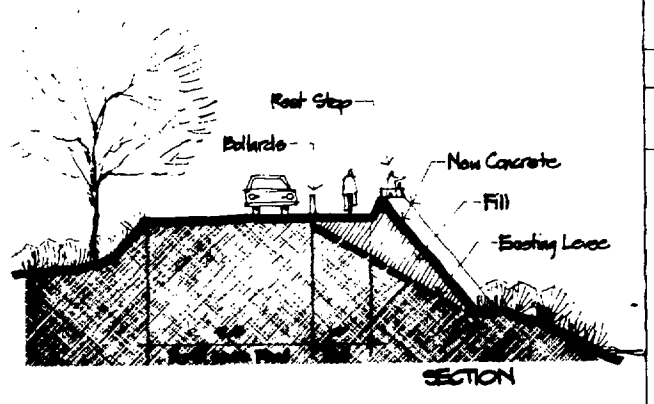


A. TRAIL ON TOP OF LEVEE





B. SHARED TRAIL/ROADWAY ON TOP OF LEVEE



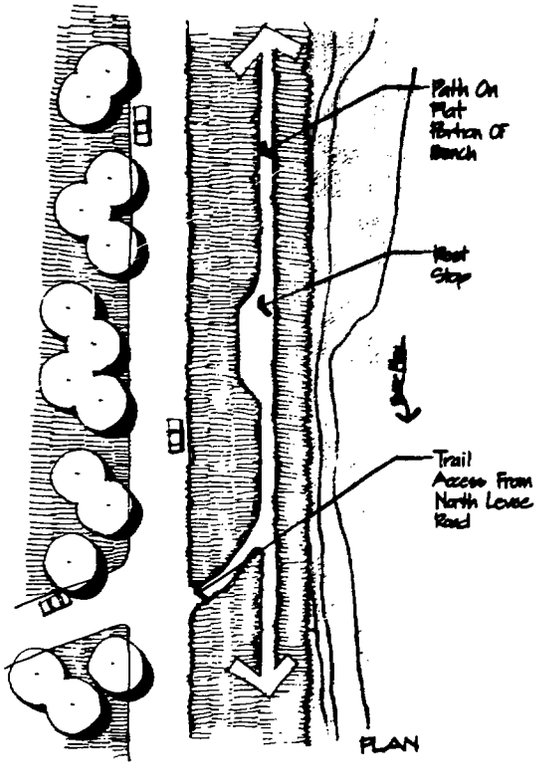
Puyallup River Project Resource Use Plan

DEPARTMENT OF THE ARMY
SEATTLE DISTRICT CORPS OF ENGINEERS

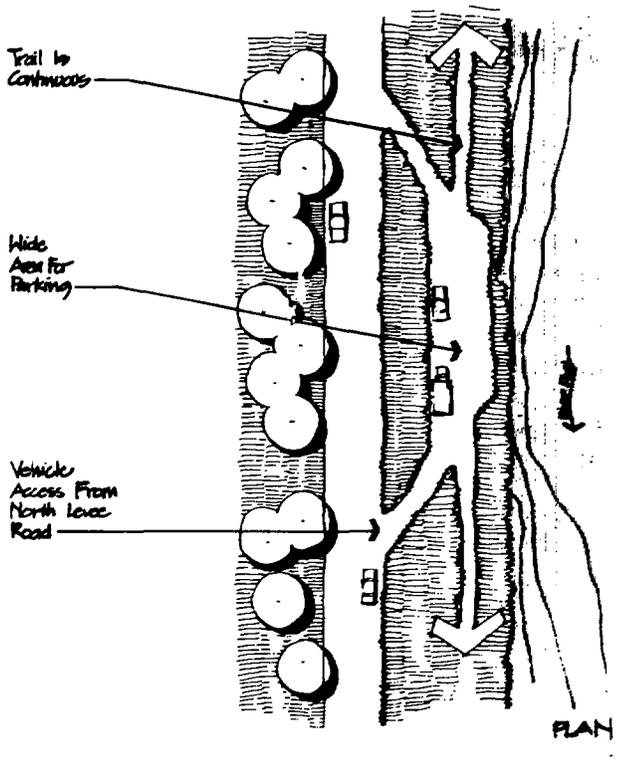
WHITELEY JACOBSEN AND ASSOCIATES

TRAIL CONCEPTS FOR NORTH LEVEE ROAD

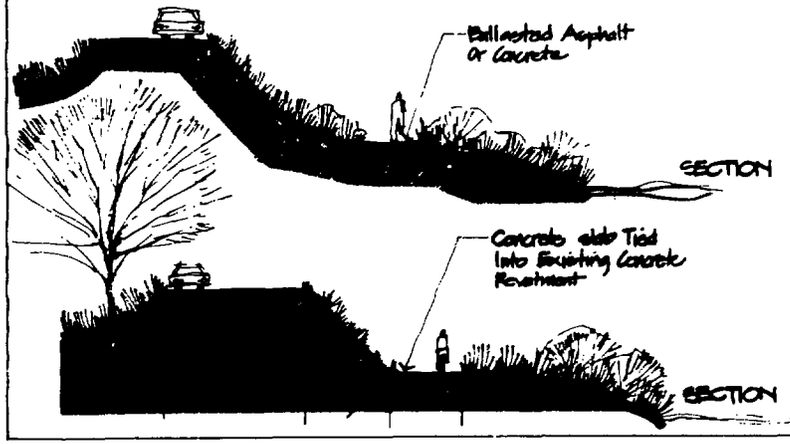
Puyallup River Project Resource Use Plan

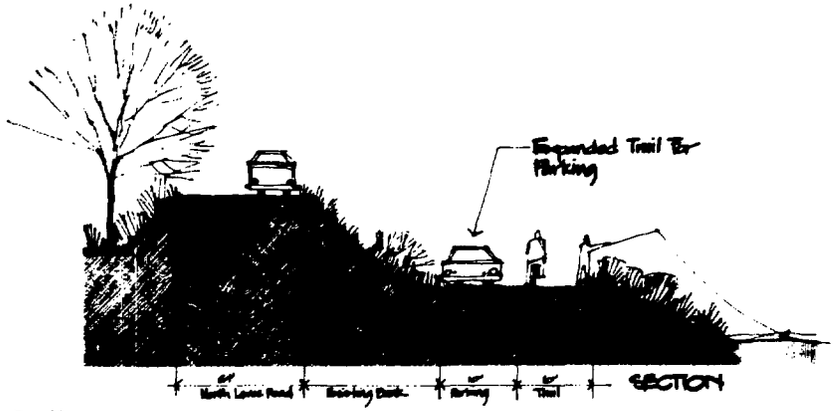


C. TRAIL ON BENCH



TRAIL WITH VEHICLE ACCESS FOR FISHING





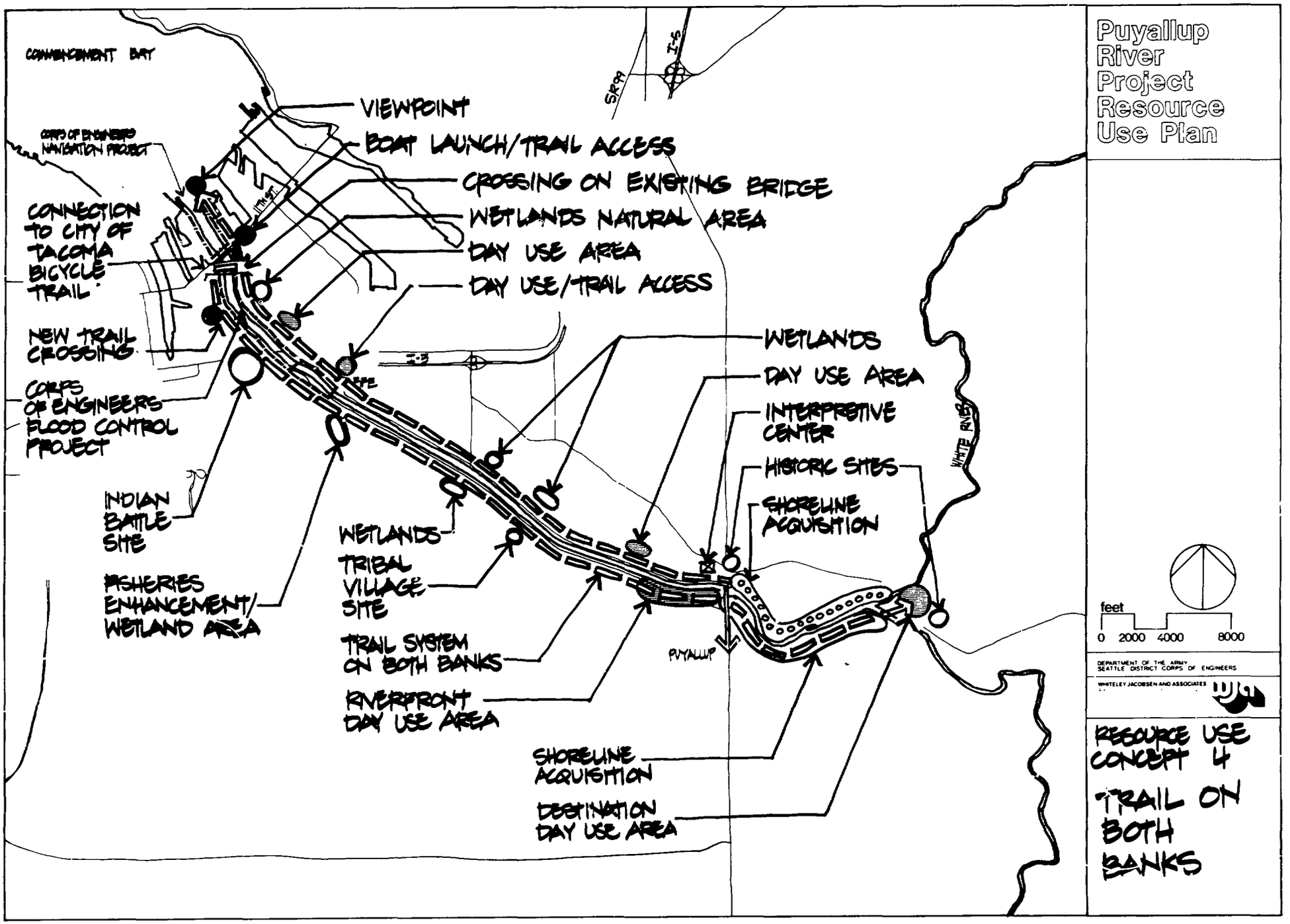
DEPARTMENT OF THE ARMY
SEATTLE DISTRICT CORPS OF ENGINEERS

WHITELEY MCCORKLE AND ASSOCIATES

TRAIL CONCEPTS FOR NORTH LEVEE ROAD

CONCEPT 4 TRAIL AND RECREATIONAL FACILITIES ON BOTH BANKS

This concept is similar to Concept 3, with the addition of the trail running from East 11th Street to Sumner along the entire length of the south bank. In addition to the facilities described for the north bank in Concept 3, the following facilities could be developed along the south bank. A trail access point in parking facilities could be developed near East 11th Street. An interpretive display could be developed near Interstate 5 explaining the historic Indian battle site nearby. At Swan Creek a former river channel could be developed as a fisheries enhancement/wetland natural area. About a mile west of Clarks Creek there is a wetland area that could be preserved and enhanced for wildlife and nature interpretation. At Clarks Creek there is a tribal village site that could be explained with an interpretive display. At Puyallup there is the opportunity to develop a linear river front day use area. Between Puyallup and Sumner private land will have to be acquired to provide a continuous trail.


COMMENCEMENT BAY
CORPS OF ENGINEERS NAVIGATION PROJECT
VIEWPOINT
BOAT LAUNCH/TRAIL ACCESS
CROSSING ON EXISTING BRIDGE
WETLANDS NATURAL AREA
DAY USE AREA
DAY USE/TRAIL ACCESS
CONNECTION TO CITY OF TACOMA BICYCLE TRAIL
NEW TRAIL CROSSING
CORPS OF ENGINEERS FLOOD CONTROL PROJECT
INDIAN BATTLE SITE
FISHERIES ENHANCEMENT/ WETLAND AREA
WETLANDS
TRIBAL VILLAGE SITE
TRAIL SYSTEM ON BOTH BANKS
RIVERFRONT DAY USE AREA
SHORELINE ACQUISITION
DESTINATION DAY USE AREA
WETLANDS
DAY USE AREA
INTERPRETIVE CENTER
HISTORIC SITES
SHORELINE ACQUISITION
WHITE RIVER
PUYALLUP
SR99
I-5
feet
0 2000 4000 8000
Puyallup River Project Resource Use Plan
DEPARTMENT OF THE ARMY SEATTLE DISTRICT CORPS OF ENGINEERS
WHITELEY JACOBSEN AND ASSOCIATES
RESOURCE USE CONCEPT 4
TRAIL ON BOTH BANKS

TRAIL CONCEPTS FOR SOUTH BANK

Trail concepts for the south bank are very similar to the concepts shown for North Levee Road. The primary difference is that the roadway on the south bank is much more heavily traveled, thus posing even more serious conflicts between vehicles and trail users.

A. Separated Roadway Trail on Top of Levee

This concept is similar to the concept for the trail on the top of the North Levee Road. It also utilizes a median strip with buffer planting to separate the trail from the roadway. Again a new concrete revetment would e required to create adequate room for the trail.

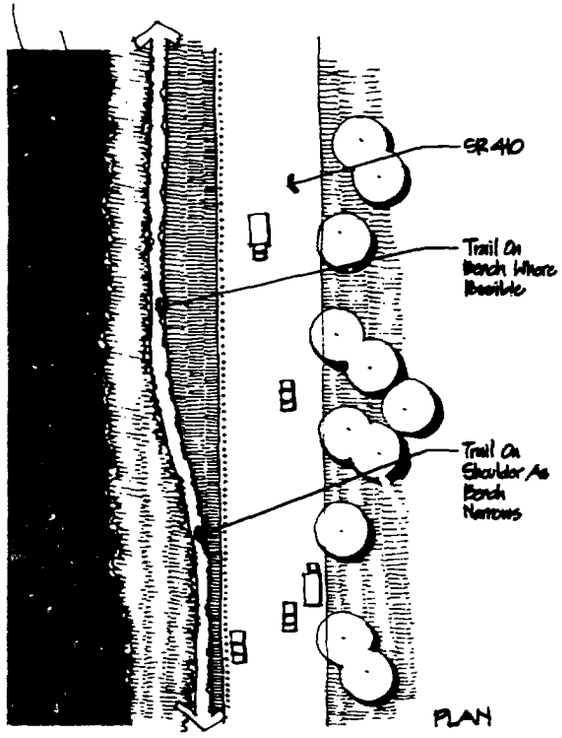
A special design feature may be required in this alternative to prevent tree roots along the planting strip from interfering with levee maintenance operations. Alternative solutions to this problem will be explored in the next phase of this project.

B. Shared Roadway/Trail on Top of Levee

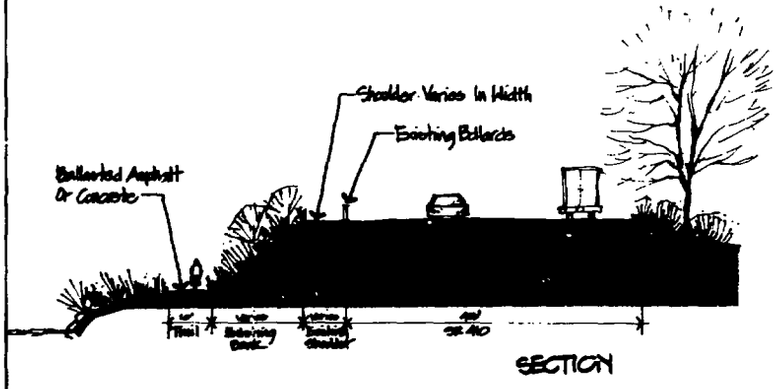
This concept is essentially the same as Concept A above. The only difference is that the median strip is replaced by a line of bollards. The bollards would provide somewhat less of a physical buffer between the roadway and the trail.

C. Trail on Bench and Shoulder

Because the siltation bench varies more drastically in width on the south bank than on the north bank in some cases, there is insufficient room to develop the trail. This concept, therefore, accommodates this and shows the trail development occuring on the bench and on the shoulder of SR 410 where the bench narrows.



C. TRAIL ON BENCH AND SHOULDER



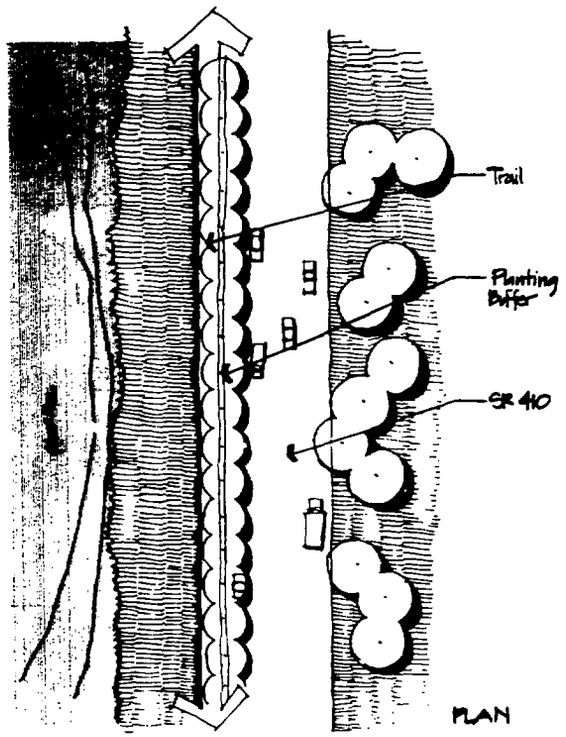
Puyallup River Project Resource Use Plan

DEPARTMENT OF THE ARMY
SEATTLE DISTRICT CORPS OF ENGINEERS

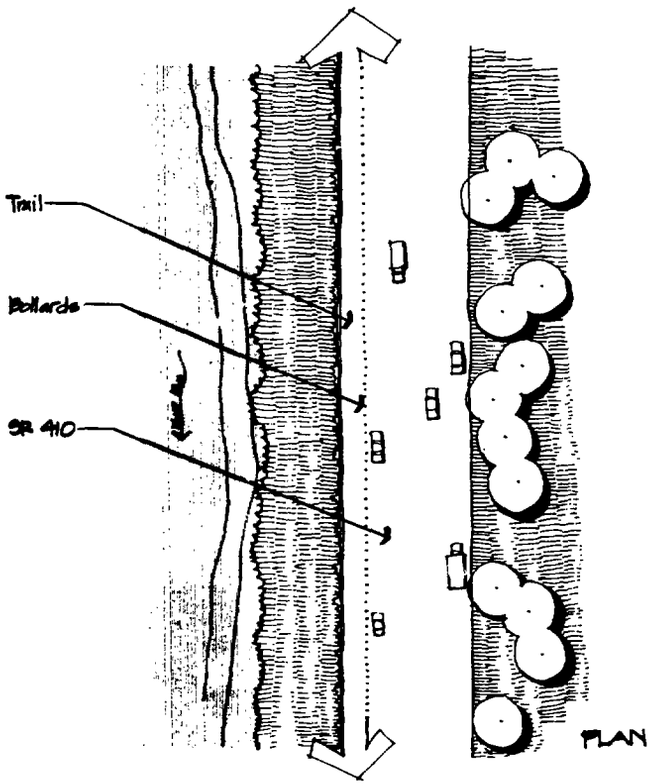
WHITELEY JACOBSEN AND ASSOCIATES
ARCHITECTURE ENGINEERING PLANNING

TRAIL CONCEPTS FOR SOUTH BANK

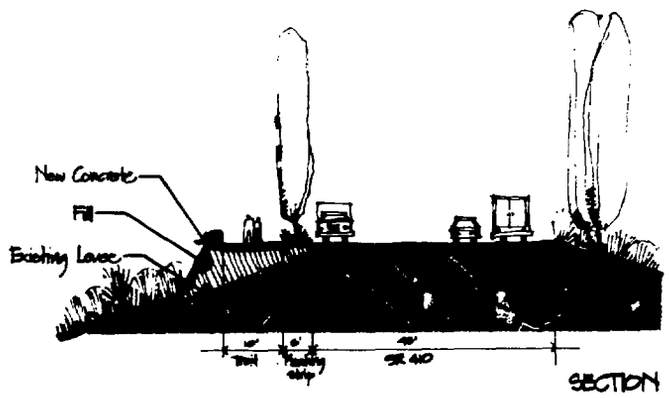
Puyallup River Project Resource Use Plan

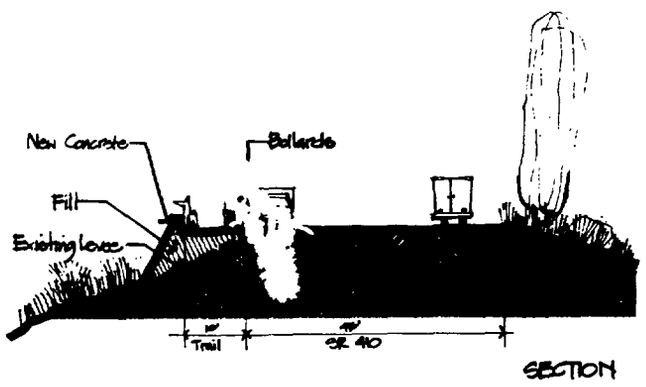


A. SEPARATED ROADWAY/TRAIL ON TOP OF LEVEE



B. SHARED ROADWAY/TRAIL ON TOP OF LEVEE





DEPARTMENT OF THE ARMY
SEATTLE DISTRICT CORPS OF ENGINEERS

WHITELEY JACOBSEN AND ASSOCIATES

TRAIL CONCEPTS FOR SOUTH BANK

EVALUATION

An evaluation of the four concepts must consider the expressed needs of agencies and groups within the study area. The need for a recreation trail and open space along the Puyallup River was shown in the Pierce County Comprehensive Park and Recreation Plan although no specific planning for implementation of such a facility has been initiated. The Tacoma Outdoor Recreation and Open Space Plan does not include recreational facilities or trails on the river. The Tacoma Public Works Department has, however, begun to study the feasibility of a recreation trail. The Puyallup Tribe of Indians have also expressed the desirability of a trail as well as a boat launch at East 11th Street.

Concept 1 does not adequately respond to the needs identified by Pierce County, City of Tacoma, Puyallup Tribe, and other groups for recreational and trail facilities along the Puyallup River. If Concept 1 "Do Nothing" were pursued, the present public utilization of the Puyallup River corridor for recreational purposes would be seriously jeopardized because of proposed highways and associated commercial development.

Concept 2 would create an attractive park and trail system on the Corps of Engineers Flood Control Project. The primary problem with this concept is that it creates a trail that really has no destination. Because there is no recreational destination, more emphasis would have to be placed on the various day use parks and facilities along the trail to create a recreational attraction.

Concept 3 would satisfy the need expressed by various groups for a trail connection between downtown Tacoma and Sumner. The north bank of the Puyallup River is probably the most feasible location for a continuous trail linkage. The character and traffic levels on North Levee Road make it more suitable for trail development than SR 410 on the south bank.

Concept 4 is most ideal because it creates a complete loop from Tacoma to Sumner and back to Tacoma. From the recreational standpoint it would be more attractive to users because of the more varied experiences to be found on each river bank. However, from a practical standpoint development of a trail on the south bank will be considerably more difficult than on the north.

RECOMMENDED CONCEPT

It is recommended that the Corps of Engineers, Pierce County, City of Tacoma, City of Fife, City of Puyallup, City of Sumner, Puyallup Tribe, Port of Tacoma and others actively pursue a combination of alternative concepts 3 and 4. For the Corps portion of the river it is recommended that a trail be developed on both sides. From Fife to Meridian Street Bridge it is recommended that a trail be developed on top of North Levee Road. From Meridian to Sumner the trail could be developed on either or both sides of the Puyallup River. Within the city of Puyallup, it is recommended that the riverfront area along the south bank be developed with a shoreline trail. With the exception of the riverfront trail in Puyallup it is not recommended to develop a trail on the south bank. If at some future date, the State of Washington undertakes the redevelopment of SR 410, then the various agencies should pursue development of a trail on the south bank.

The Resource Use Plan contained in this section is for the Corps of Engineers Flood Control Project only. Ultimately the recommended trail and recreational development should be extended along North Levee Road to Puyallup and eventually to the City of Sumner. Development of a trail and recreational system from Tacoma to Sumner will require the cooperative efforts of the Corps of Engineers, Pierce County, City of Tacoma, Port of Tacoma, Inter County River Improvement District, City of Fife, City of Puyallup, City of Sumner and the Puyallup Tribe.

6. RESOURCE USE PLAN

RESOURCE USE PLAN

The Resource Use Plan for the Corps of Engineers Flood Control Project utilizes all of the existing Corps owned land. In addition, easements or property acquisition would be required for development of a shoreline trail from East 11th Street to a viewpoint at the mouth of the river, for a boat launch day use area at East 11th Street, and for a day use area near Fife. The following facilities would be developed under this resource use concept:

SEGMENT A - MOUTH TO EAST ELEVENTH STREET

1. Viewpoint

   The mouth of the Puyallup affords sweeping views to northeast Tacoma, Commencement Bay, Downtown Tacoma, and Point Defiance. A viewing platform would be created to take advantage of these views. In addition, piling could be replaced along the existing jetty to create a platform for sport fishing.

2. Shoreline Trail

   A narrow strip between the viewpoint and East 11th Street should be acquired for development of a trail connection.

3. Boat Launch

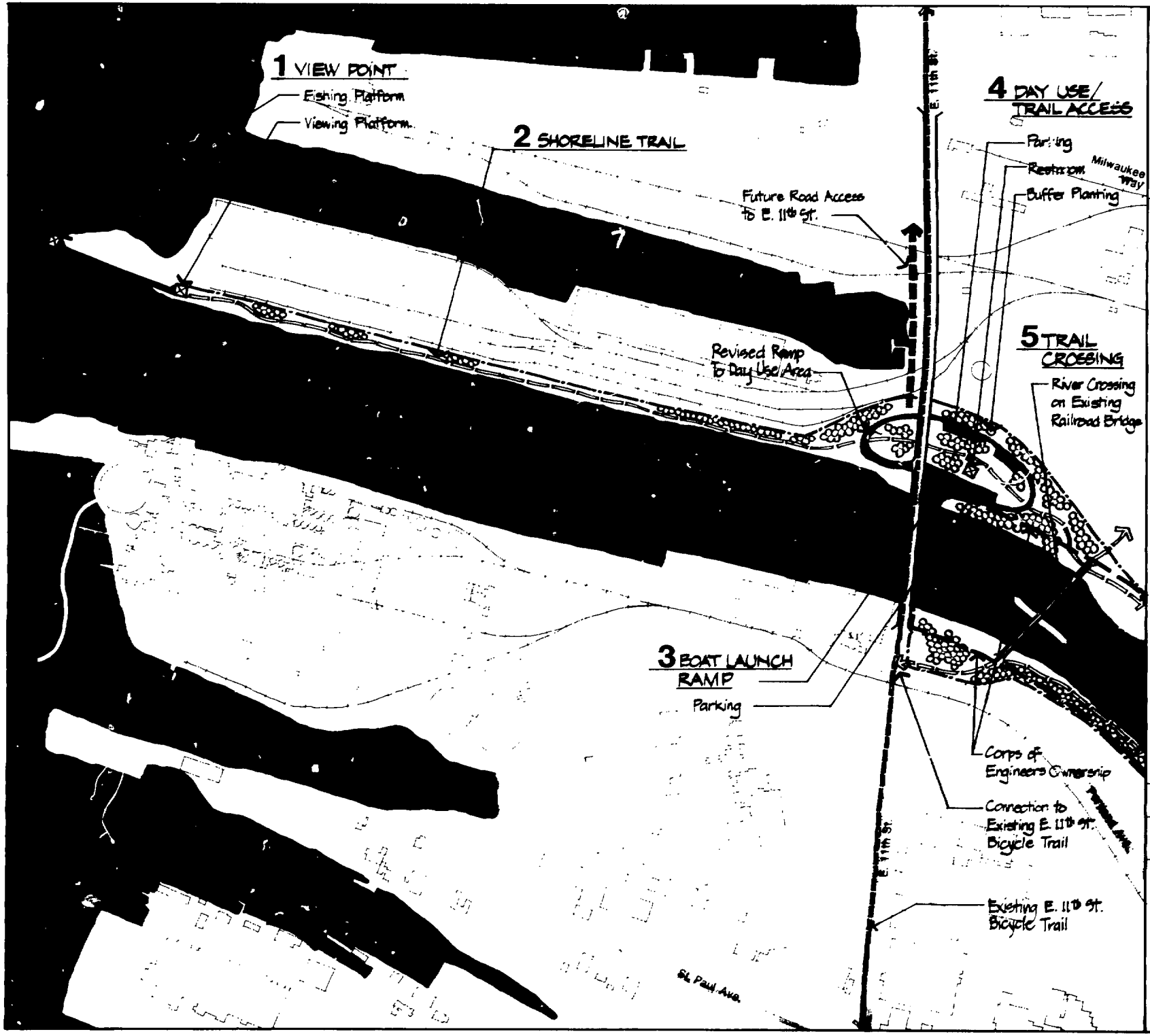
   The area under the East 11th Street Bridge is presently used by the Indians and others for informal launching of small motor boats. This is one of the few suitable locations on the Puyallup for a launch facility. It is recommended that a two lane launch ramp and parking area be developed at this point.

4. Trail Access/Day Use

   This facility would also be developed immediately adjacent to the East 11th Street Bridge. Facilities would include parking areas, restrooms and picnicking sites.

5. Trail on Existing Railroad Bridge

   The existing Milwaukee Railroad Bridge should be acquired as a trail linkage across the Puyallup River. This linkage would also create an at grade connection to the existing East 11th Street bicycle trail.


1 VIEW POINT
Fishing Platform
Viewing Platform
2 SHORELINE TRAIL
Future Road Access To E. 11th St.
Revised Ramp To Day Use Area
3 BOAT LAUNCH RAMP
Parking
4 DAY USE/ TRAIL ACCESS
Parking
Restroom
Buffer Planting
Milwaukee Way
5 TRAIL CROSSING
River Crossing on Existing Railroad Bridge
Corps of Engineers Ownership
Connection to Existing E. 11th St. Bicycle Trail
Existing E. 11th St. Bicycle Trail
E. 11th St.
St. Paul Ave.
Puyallup River Project Resource Use Plan
KEY
Corps Project Boundary
Acquisition Area
feet
0 100 200 400 800
DEPARTMENT OF THE ARMY
SEATTLE DISTRICT
CORPS OF ENGINEERS
RESOURCE USE PLAN
MOUTH TO E. ELEVENTH ST. SEGMENT
A

SEGMENT B

6. Trail Access

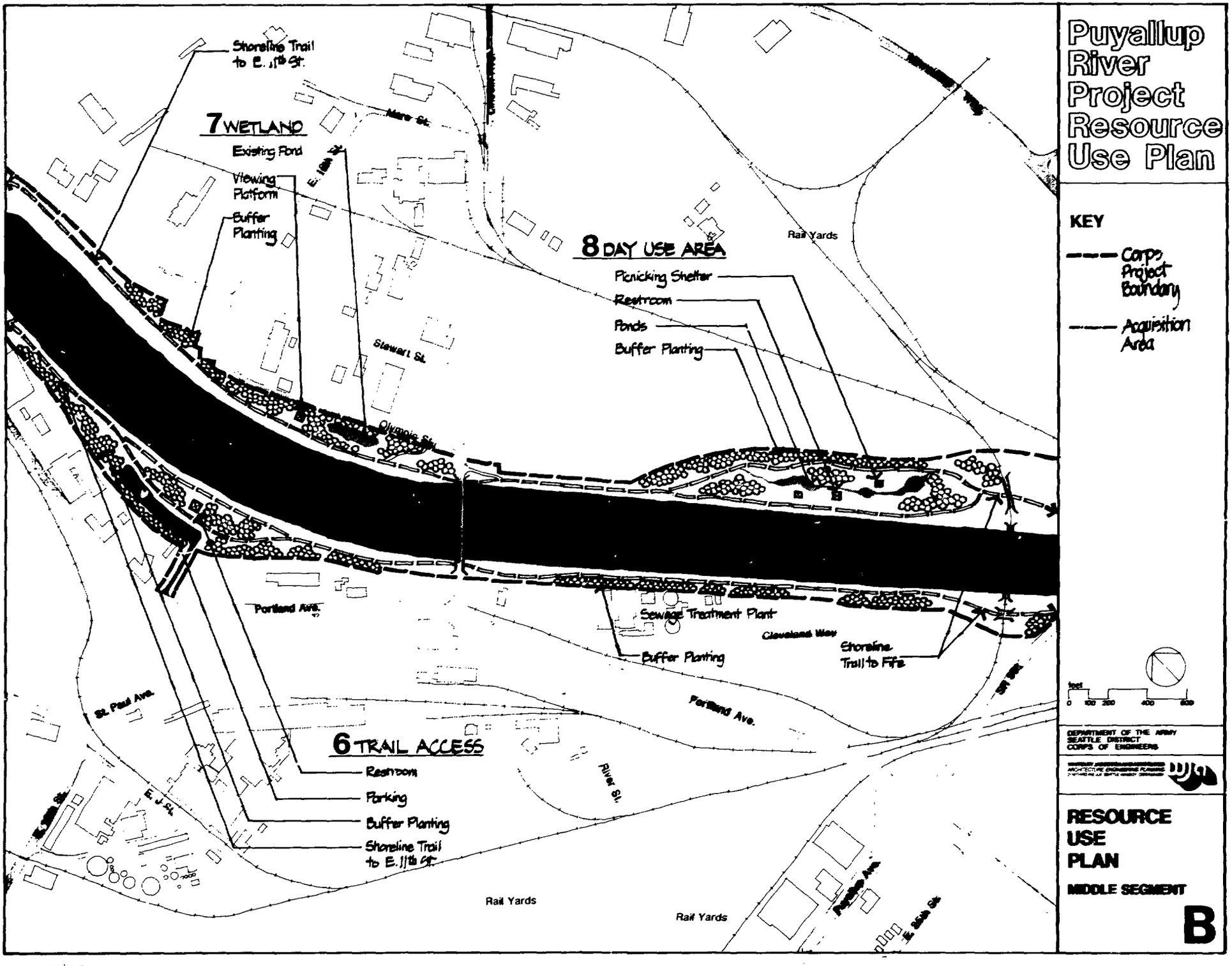
Halfway between East 11th Street and Lincoln Avenue is a small area of land owned by the Corps which could be developed as a trail access point. Facilities would include a small parking area and sanitary facilities.

7. Wetland

An existing wetland on Corps property near Lincoln Avenue should be preserved and enhanced. Buffer planting and fencing should be developed to protect the wetland from encroaching industries. A small viewing platform, could be constructed with an interpretive signing, to permit wildlife viewing.

8. Day Use Area

This area is presently leased by the Corps of Engineers for scrap wood storage. It could be developed into a linear passive day use area. Site drainage problems could be resolved with the creation of small ponds. Facilities to be developed at this site could include a few picnicking sites and shelters and a sanitary facility.



Puyallup River Project Resource Use Plan

KEY

- Corps Project Boundary
- Acquisition Area

feet
0 100 200 400 600

DEPARTMENT OF THE ARMY
SEATTLE DISTRICT
CORPS OF ENGINEERS

RESOURCE USE PLAN

MIDDLE SEGMENT

B

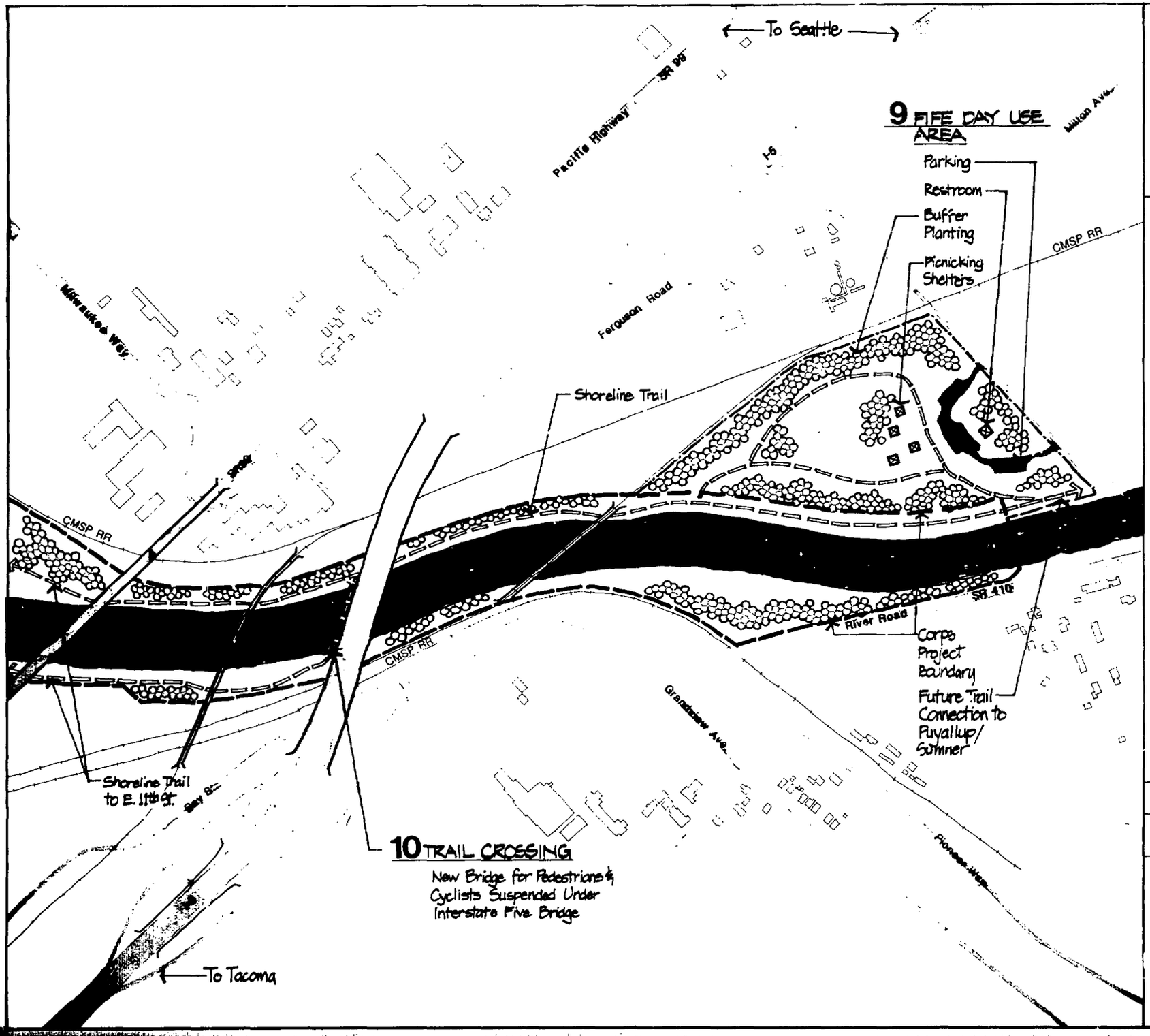
SEGMENT C

9. Fife Day Use Area

A large open meadow located beteen North Levee Road, 30th Street, Fergusson Road and Interstate 5 could be acquired as a major day use/trail destination area. If this site is not acquired for recreational purposes it most certainly will be used for industrial development. Facilities to be developed at the site include parking areas, restrooms, picnicking shelters and open areas for active day use.

10. Trail Crossing Under I-5 Bridge

A bridge for pedestrians and bicycles could be created by constructing the suspension bridge on the underside of the Interstate 5 highway bridge. There is sufficient vertical clearance above the river to permit this development.



Puyallup River Project Resource Use Plan

KEY

- Corps Project Boundary
- Acquisition Area

feet
0 100 200 400 600

DEPARTMENT OF THE ARMY
SEATTLE DISTRICT
CORPS OF ENGINEERS

WHITELEY JACOBSEN AND ASSOCIATES
ARCHITECTURE ENGINEERING PLANNING

RESOURCE USE PLAN

INTERSTATE FIVE SEGMENT

C

The first phase of this study has examined the potential for recreational resource development along the Puyallup River. Discussions with local agencies indicate the need and desirability of trail and recreational development along the Puyallup. The first phase has also examined the feasibility of developing various recreational facilities.

The next phase of the study will take steps to bring the resource use concepts contained in this report to reality. Governmental agencies will be contacted to help sponsor the facility development as outlined in this conceptual plan. The public will be contacted to assess its needs and desires. The plan will be refined and construction and operating costs estimated. Finally a development schedule and implementation program will be prepared.

The Corps of Engineers is prepared to cooperate in preparation of more detailed plans if there is an expression of interest from local governmental bodies to participate in the recreational resource development of the Puyallup River.

7. IMPLEMENTATION

IMPLEMENTATION PROGRAM

Coordination Among Agencies

Throughout the preparation of this study the need has been apparent for an interagency committee to coordinate resource and recreational planning for the Puyallup River. It is recommended that an agreement between agencies be created under the Washington State Interlocal Cooperation Act, RCW39.34 which would address the problems of planning and management of all facilities proposed by this study. Membership on the committee might include: the Corps of Engineers, the Inter County River Improvement District, Pierce County, City of Tacoma, City of Fife, City of Puyallup, City of Sumner, Puyallup Tribe and the Port of Tacoma. This committee could meet on a regular basis to review each others' projects and management plan for the Puyallup River.

Potential Funding Sources

The following is a discussion of several mechanisms which might be considered for implementing the Resource Use Plan. Some of these mechanisms are already utilized by agencies for projects in the Puyallup Valley area while others have not yet been undertaken.

Federal Funding

Corps of Engineers: The Corps administers funds and programs for flood control and navigational projects. It also has regulatory jurisdiction over shoreline modification. The Corps participation in a project is limited to funding 50% of the development within the authorized flood control project. Public Law 89-72 defines the basis for cost sharing by the Corps of Engineers. The law states that funding for recreation at Corps projects will be shared on a 50-50 basis with local sponsors.

Department of Housing and Urban Development: HUD allocates Community Development Block Grants to local governments for use on their development projects. Block Grant funds from Pierce County, the City of Tacoma and other jurisdictions could be allocated to development of recreational facilities along the Puyallup. HUD's urban development action grant program also has some potential for funding of the project. Primary emphasis of the UDAG Program however, is creation of economic and employment opportunities.

State Funding

The State of Washington has two primary sources for funding recreational developments: The general fund of the state itself, which is allocated by the legislature and special funding administered by the InterAgency Committee for Outdoor Recreation (IAC), the State Parks and Recreation Commission primarily makes use of the general fund for recreational operations. All others must seek funding through the IAC. The IAC was established in 1964 to administer funding authorized by the voters under Initiative 215. The IAC was directed to assist state and local agencies in the acquisition and development of outdoor recreation resources. The funds that make up the IAC Outdoor Recreation Account come from three voter-approved bond issues. (Referendum 11 in 1964, Referendum 18 in 1968, and Referendum 28 in 1972), plus funds from Initiative 215 and the Federal Land and Water Conservation Fund. In 1967 the original act creating the IAC was amended by the Legislative Action to add responsibility for state wide comprehensive planning for outdoor recreation and open space.

Local agencies eligible to receive grants-in-aid from the outdoor recreation account are any county, city, town, port district, park and recreational district, metropolitan park district, or other municipal corporation which is authorized to acquire or improve public or outdoor recreation lands. Local agencies are required to have a current local comprehensive park and recreational plan and capital improvement program on file for the IAC. Funding for local agency projects generally requires at least 25% of the cost to be borne as a local share; 50% of the cost of such a project may come from federal funds when applicable. The outdoor recreation account generally supplies 25% of local project costs but may contribute up to 75% of the total if no federal funds are available. For state agency projects 100%, funding comes from the outdoor recreation account, local projects approved by the IAC for 1977 totalled $6.4 million with the following funding breakdown: Land and Water Conservation Funds (Federal) $2 million; Referendum 28, $800,000; Initiative 215, $900,000. The local match was $2.1 million.

NOTES

1. Department of the Army, Office of the Chief of Engineers Washington, D.C. Regulation No. 1105-2-167 Resource Use: Establishment of Objectives. p.1

2. IBID. p.2

3. Inter County River Improvement, W.J. Roberts, Chief Engineer Report on Flood Control of White-stuck and Puyallup Rivers January, 1920. pgs. 11-12

4. Tacoma, Washington Master Program for Shoreline Development December, 1976.

5. Puyallup Tribe of Indians Draft Natural Determinants Elements, Comprehensive Plan, 1979. pgs. 4-5

6. Pierce County, Comprehensive Park & Recreation System Plan Olson, Richert, Bignold, consultants. pgs. 1-4

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Pierce County Shoreline Master Program March, 1979

Puget Sound Council of Governments, Pierce Subregional Council, Pierce County Population and Employment Forecasts May , 1979.

Puyallup Tribe of Indians Draft Natural Determinants Elements, Comprehensive Plan, 1979

Tacoma, Washington Generalized Land Use Plan, Draft April, 1979.

Tacoma, Washington Interim Generalized Outdoor Recreation and Open Space Plan 1978-1990.

Tacoma, Washington Master Program for Shoreline Development December, 1976

Tacoma, Washington Puyallup River Basin Water Quality Management Plan Consoer, Townsend and Associates, consulting engineers, June, 1974.

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